GSM TELEPHONE

GT-B5510

SERVICE Manual

GSM TELEPHONE

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2. Specification

2-1. GSM General Specification

	GSM850 Phase 1	EGSM 900 Phase 2	DCS1800 Phase 1	PCS1900	WCDMA2100	WCDMA850	WCDMA1900
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	1922~1977 2112~2167	826~846 871~891	1852~1907 1932~1987
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810	UL:9612~9888DL:10562~10838	UL:4132~4233 DL:4357~4458	UL:9262~9538 DL:9662~9938
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	190MHz	45MHz	80MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	3.84Mcps	3.84Mcps	3.84Mcps
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	FrameLength: 10ms Slotlength: 0.667ms	FrameLength: 10ms Slotlength: 0.667ms	FrameLength: 10ms Slotlength: 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSKHQPSK	QPSKHQPSK	QPSKHQPSK
MS Power	33dBm~5dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm~-50dBm	24dBm~-50dBm	24dBm~-50dBm
Power Class	5pcl ~ 19pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-104.7dBm	-104.7dBm
TDMA Mux	8	8	8	8	8	8	8
Cell Radius	35Km	35Km	2Km	2Km	2Km	2Km	2Km

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2-2. GSM Tx Power Class

TX Power control level	GSM850
5	33±2 dBm
6	31±2 dBm
7	29±2 dBm
8	27±2 dBm
9	25±2 dBm
10	23±2 dBm
11	21±2 dBm
12	19±2 dBm
13	17±2 dBm
14	15±2 dBm
15	13±2 dBm
16	11±3 dBm
17	9±3dBm
18	7±3 dBm
19	5±3 dBm

TX Power control level	EGSM900
5	33±2 dBm
6	31±2 dBm
7	29±2 dBm
8	27±2 dBm
9	25±2 dBm
10	23±2 dBm
11	21±2 dBm
12	19±2 dBm
13	17±2 dBm
14	15±2 dBm
15	13±2 dBm
16	11±3 dBm
17	9±3dBm
18	7±3 dBm
19	5±3 dBm

TX Power control level	DCS1800
0	30±3 dBm
1	28±3 dBm
2	26±3 dBm
3	24±3 dBm
4	22±3 dBm
5	20±3 dBm
6	18±3 dBm
7	16±3 dBm
8	14±3 dBm
9	12±4 dBm
10	10±4 dBm
11	8±4 dBm
12	6±4 dBm
13	4±4 dBm
14	2±5 dBm
15	0±5 dBm

TX Power control level	PCS1900
0	30±3 dBm
1	28±3 dBm
2	26±3 dBm
3	24±3 dBm
4	22±3 dBm
5	20±3 dBm
6	18±3 dBm
7	16±3 dBm
8	14±3 dBm
9	12±4 dBm
10	10±4 dBm
11	8±4 dBm
12	6±4 dBm
13	4±4 dBm
14	2±5 dBm
15	0±5 dBm

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3. Operation Instruction and Installation

Main Function

- GSM/EDGE 850/900/1800/1900 , 3G(900/2100)
- HSDPA 7.2 Mbps
- 2.6” LQVGA 240x320
- OS Version - Gingerbread
- Full Touch Qwerty BAR Phone
- 3M FF Camera
- FM Radio Receiver
- Bluetooth v3.0
- USB v2.0 / Wi-Fi b/g/n
- SMS/MMS/Email

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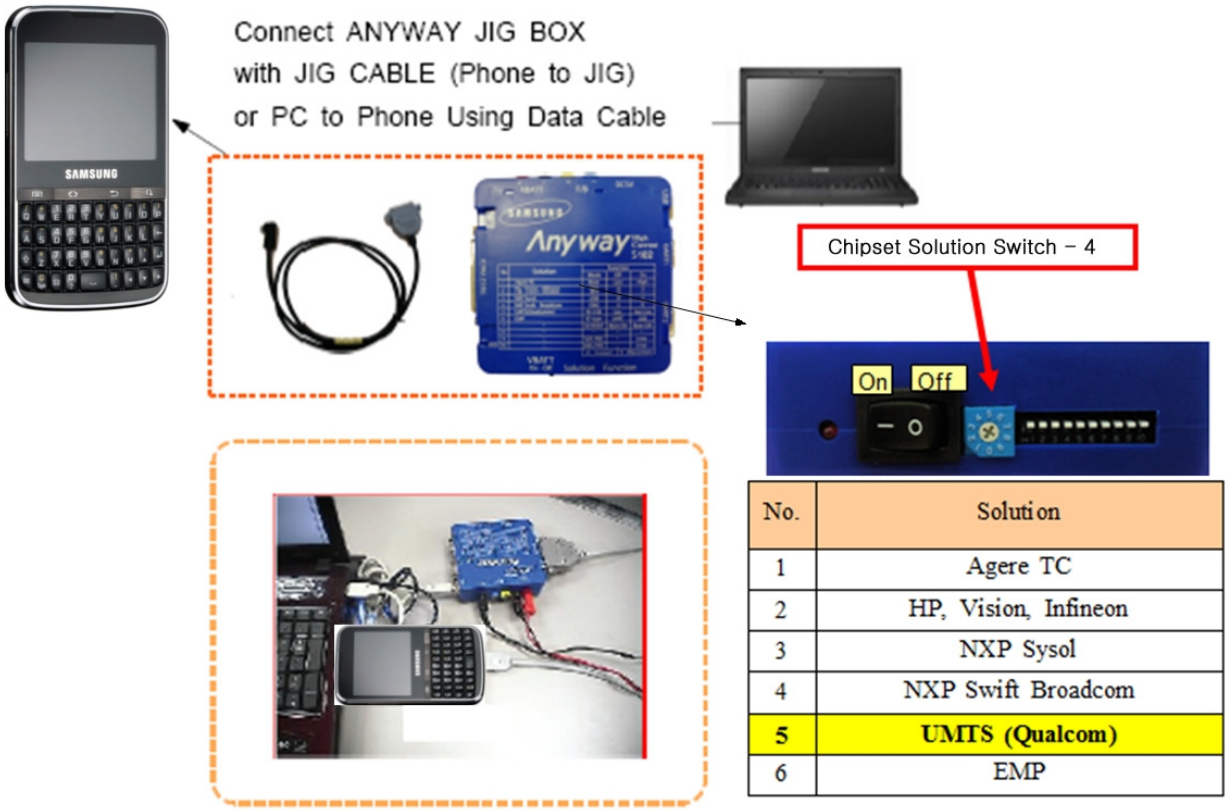
6. Level 1 Repair

6-1. Software Download

6-1-1. Required items in order to install S/W

- Installation program: Downloader Program (**Odin3_v1.84**)
- GT-B5510 Mobile Phone
- Data Cable
- JIG BOX (GH99-36900B)
- JIG Cable (GH39-01339A)
- Adapter (GH99-38251A)
- RF test cable (GH39-00985A)
- Serial Cable
- Mobile device specific S/W: Binary files

※ **Settings**



No.	Solution
1	Agere TC
2	HP, Vision, Infineon
3	NXP Sysol
4	NXP Swift Broadcom
5	**UMTS (Qualcom)**
6	EMP

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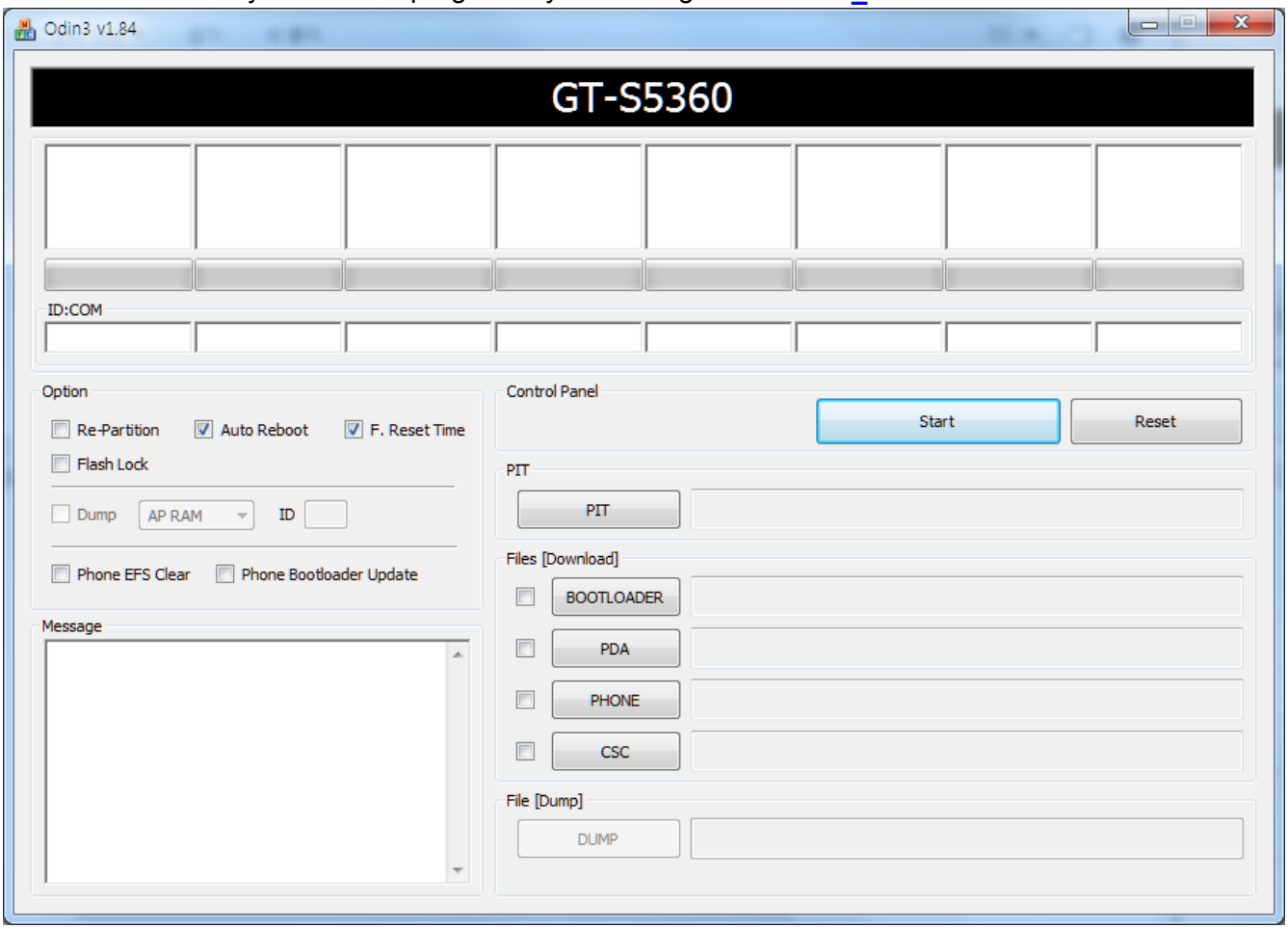
6-1-2. S/W Download Process

1. Load the binary download program by executing the "**Odin3_v1.84**"



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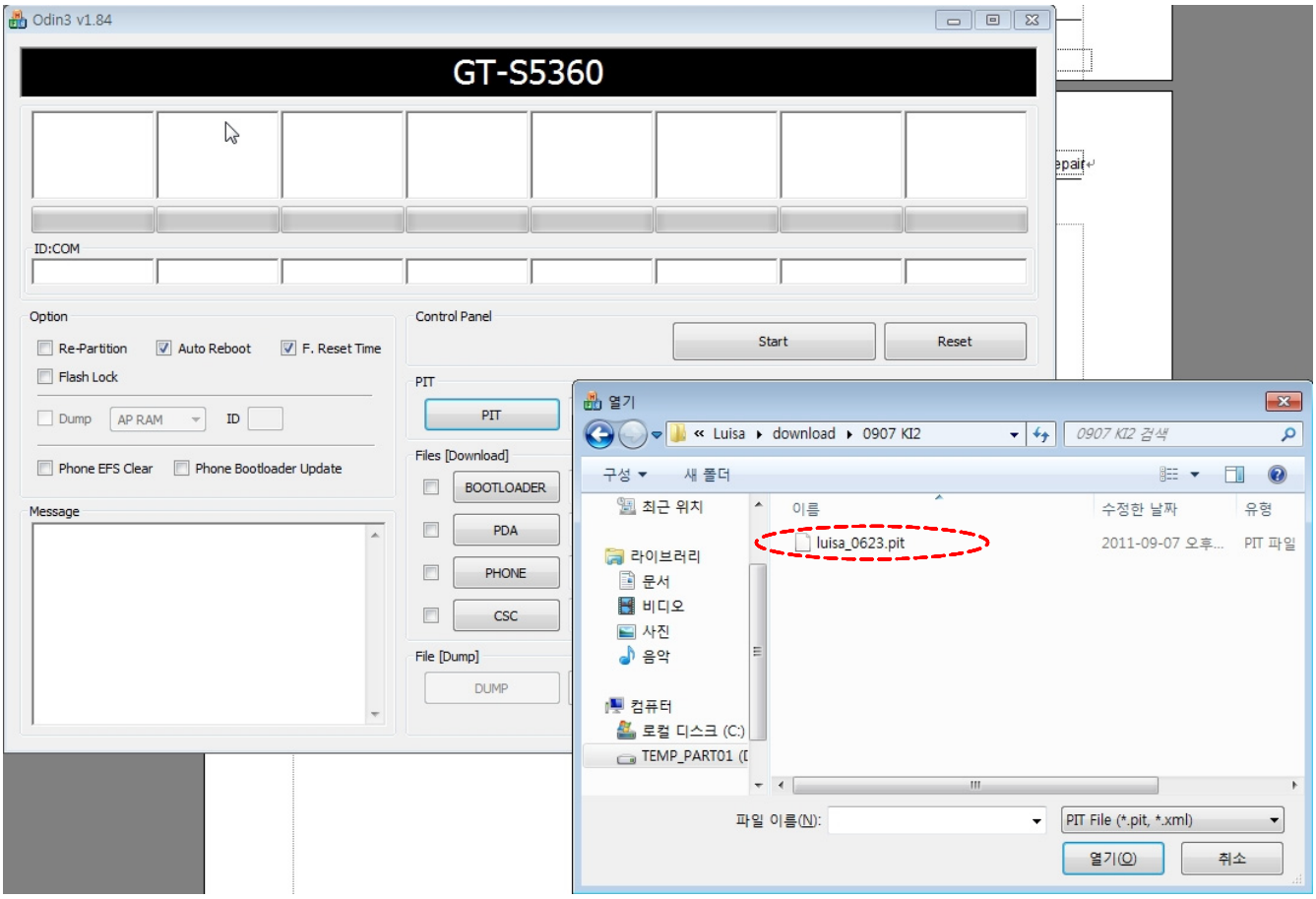
2. Click the PIT Button and Insert "pit" binary file



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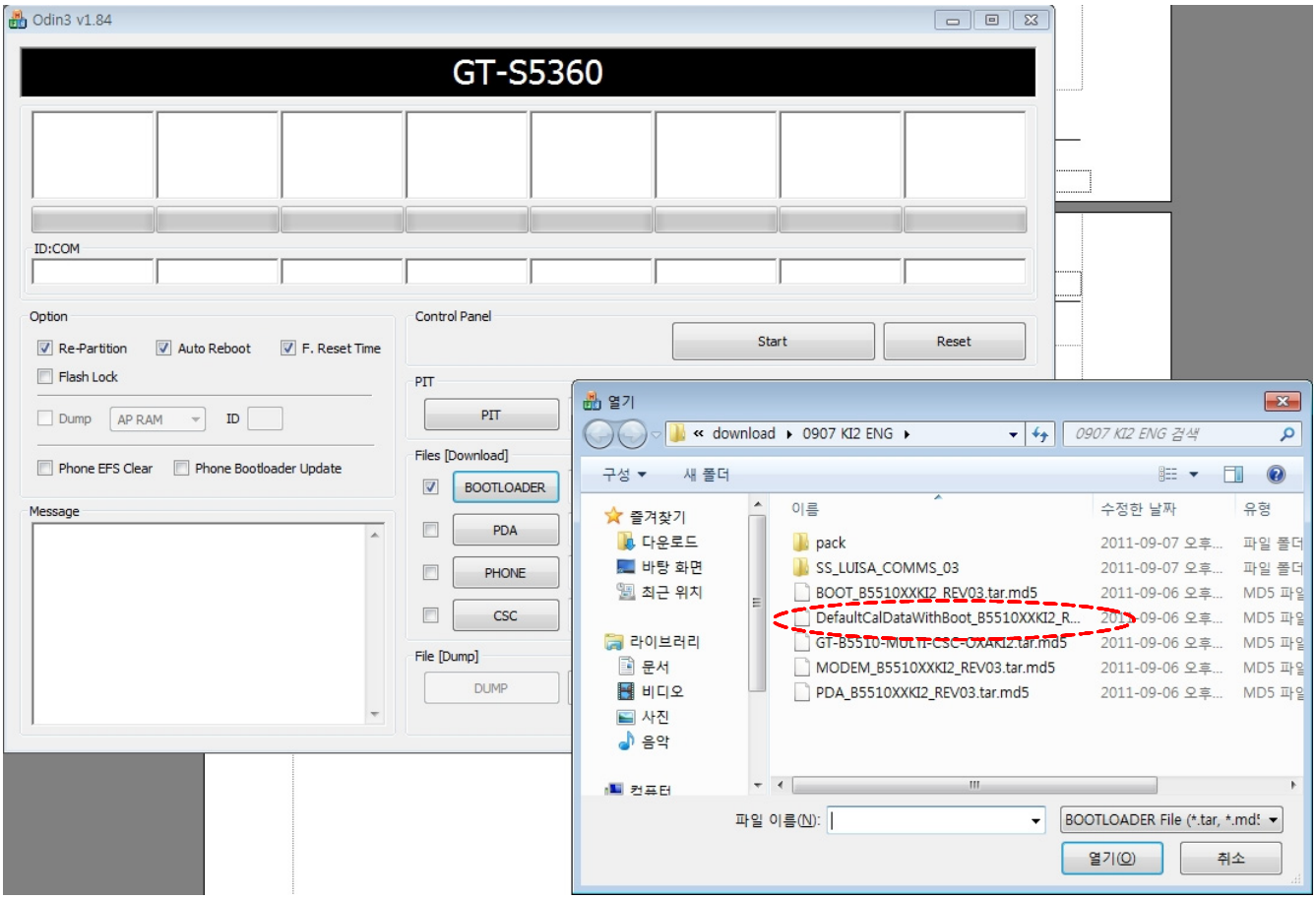
3. Click the BOOTLOADER Button and Insert "DefaultCalDataWithBoot_...." md5 file



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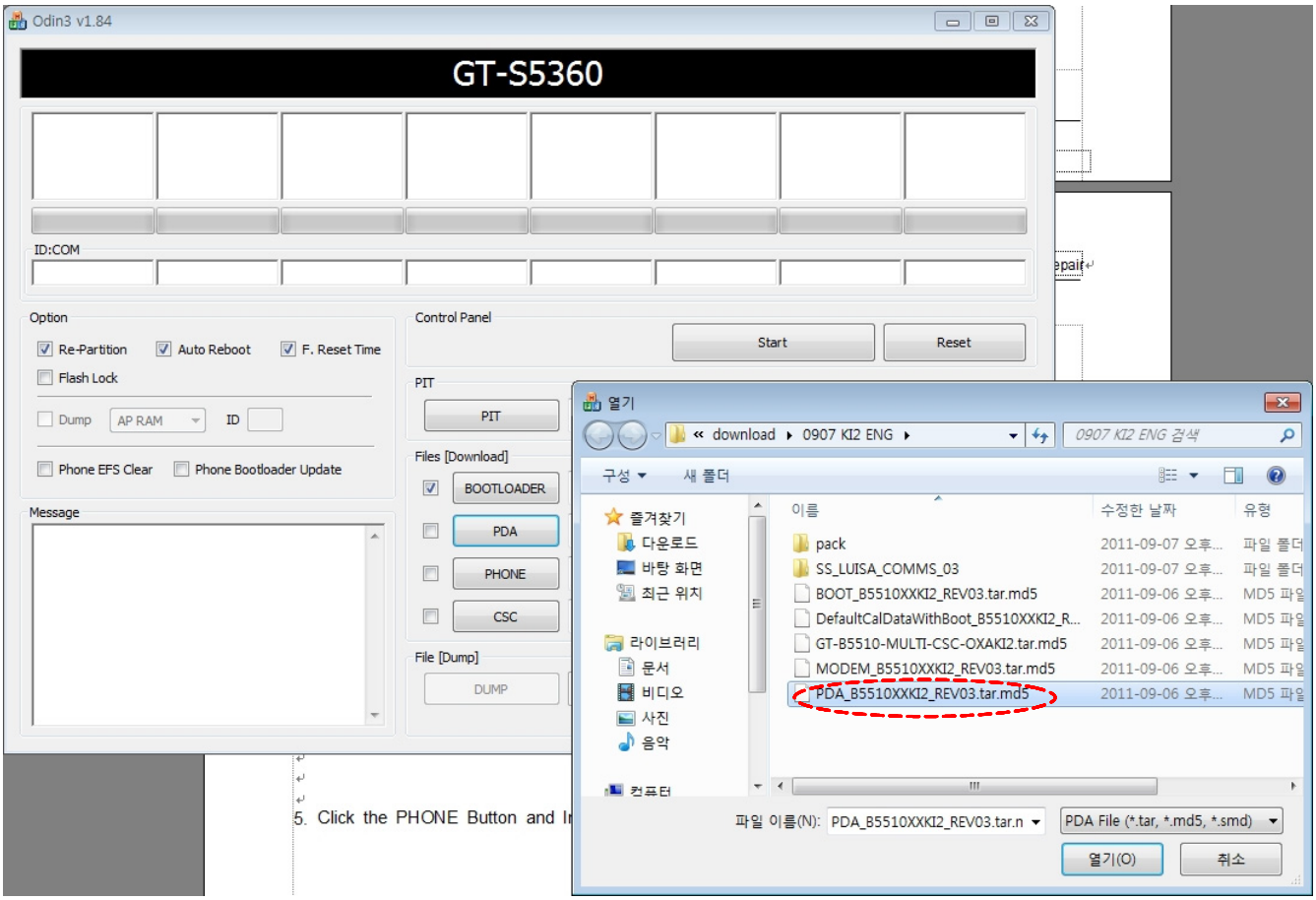
4. Click the PDA Button and Insert "PDA_...." md5 file



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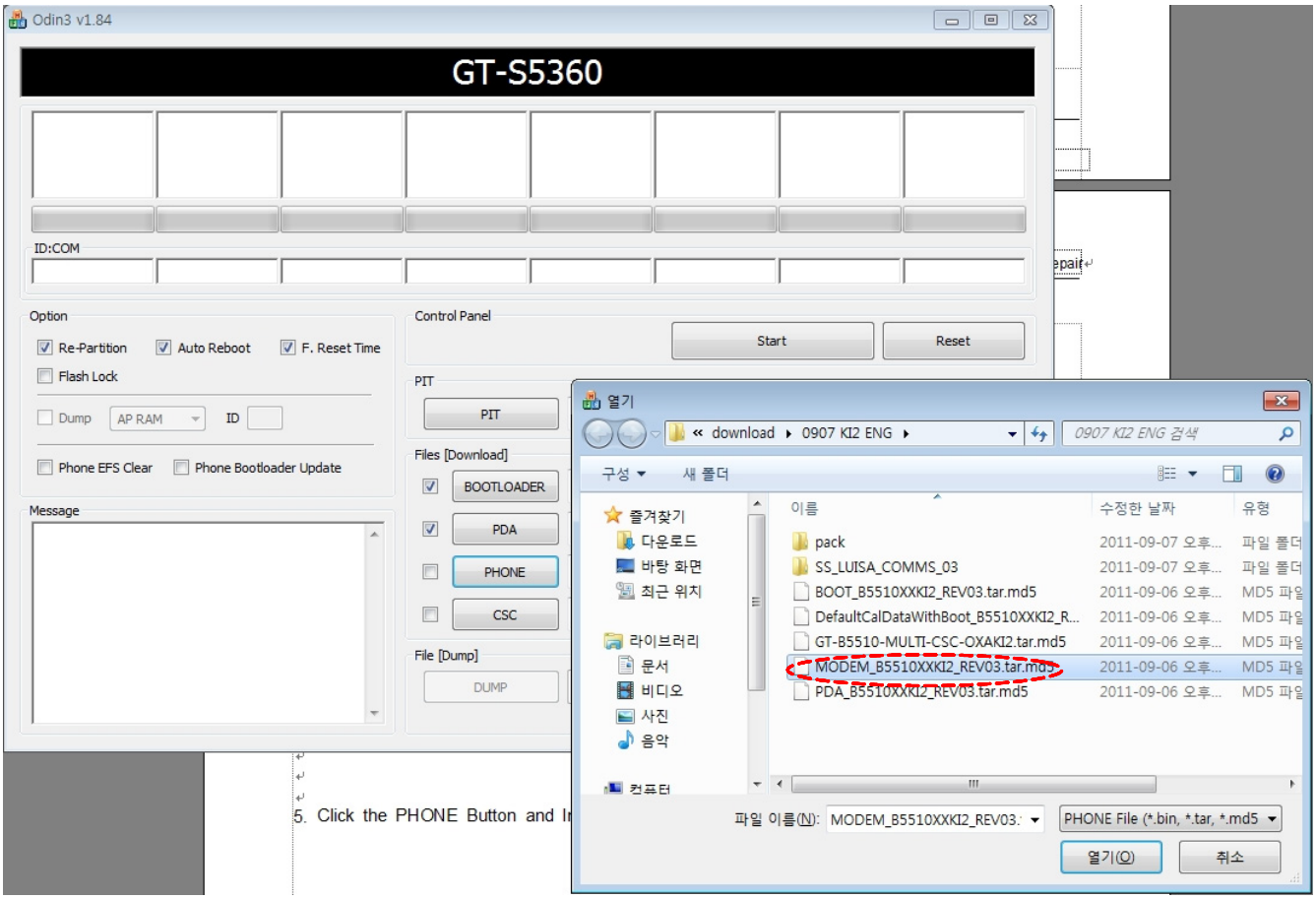
5. Click the PHONE Button and Insert "MODEM_...." md5 file



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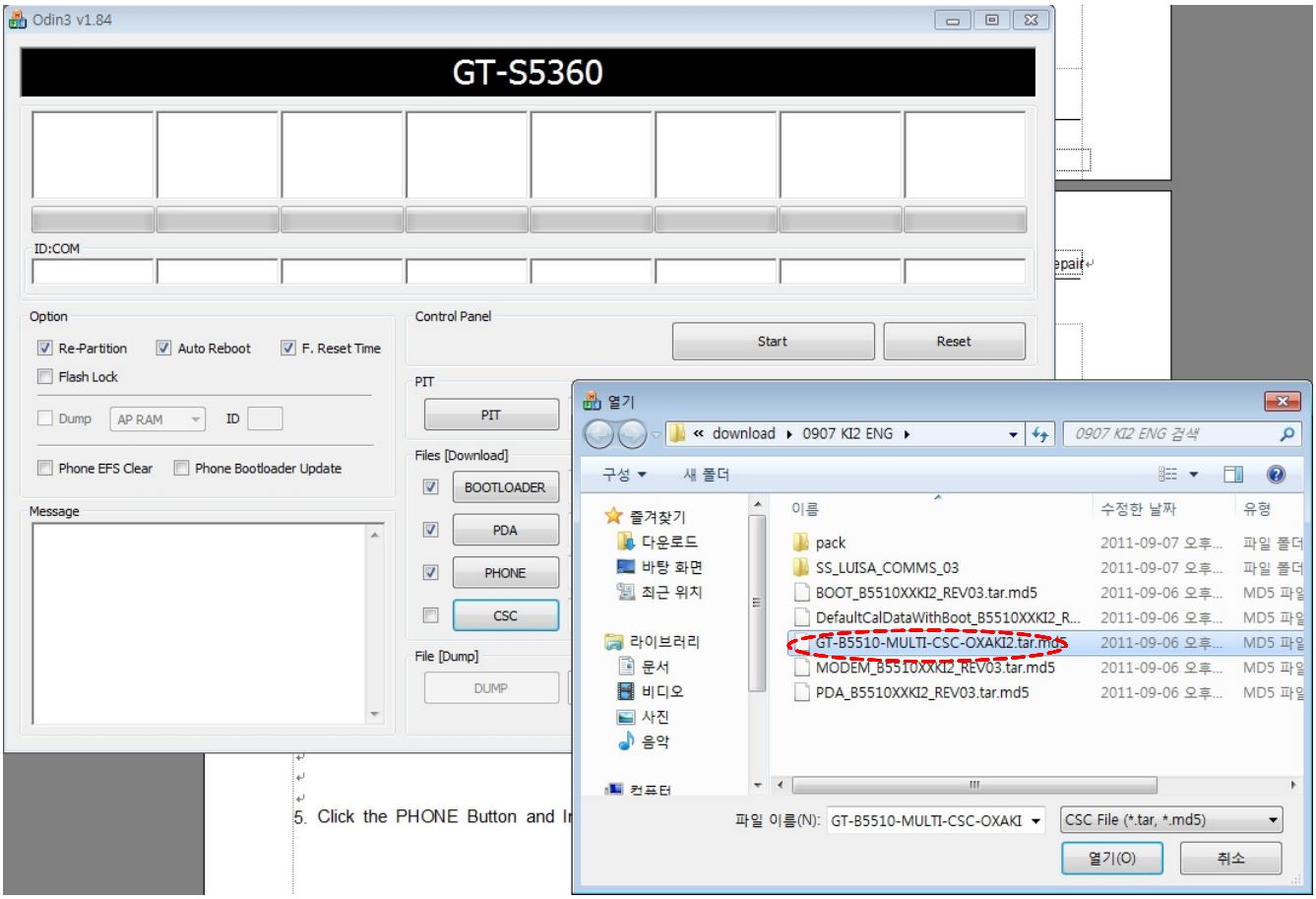
6. Click the CSC Button and Insert "GT-B5510-MULTI-CSC-...." md5 file



5. Click the PHONE Button and I

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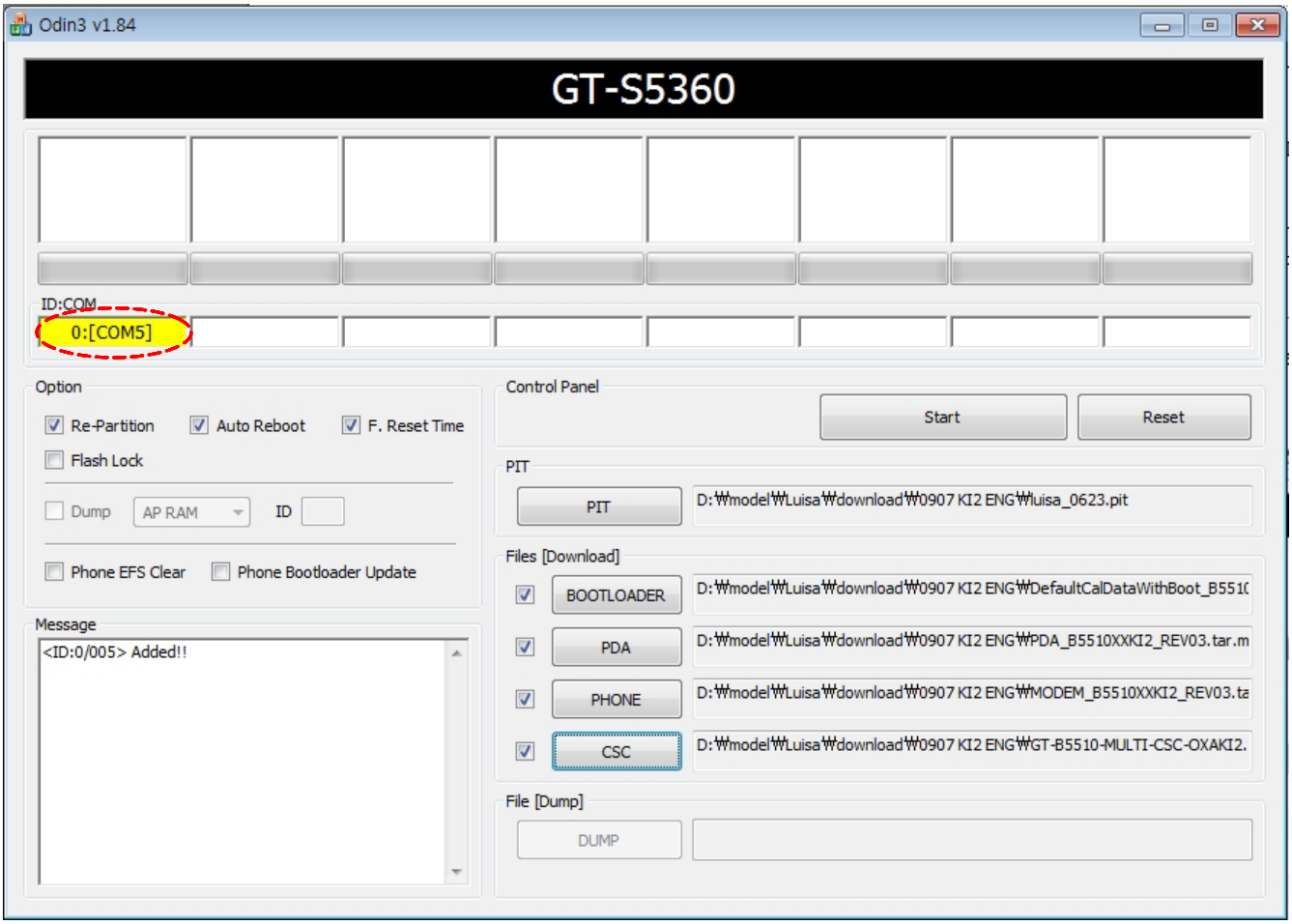
7. Connect phone to PC

You have to set the phone as a download mode by pressing Volume down + Middle Key + Power on key simultaneously before connecting to PC.

Color will be changed to yellow if PC recognize phone properly.



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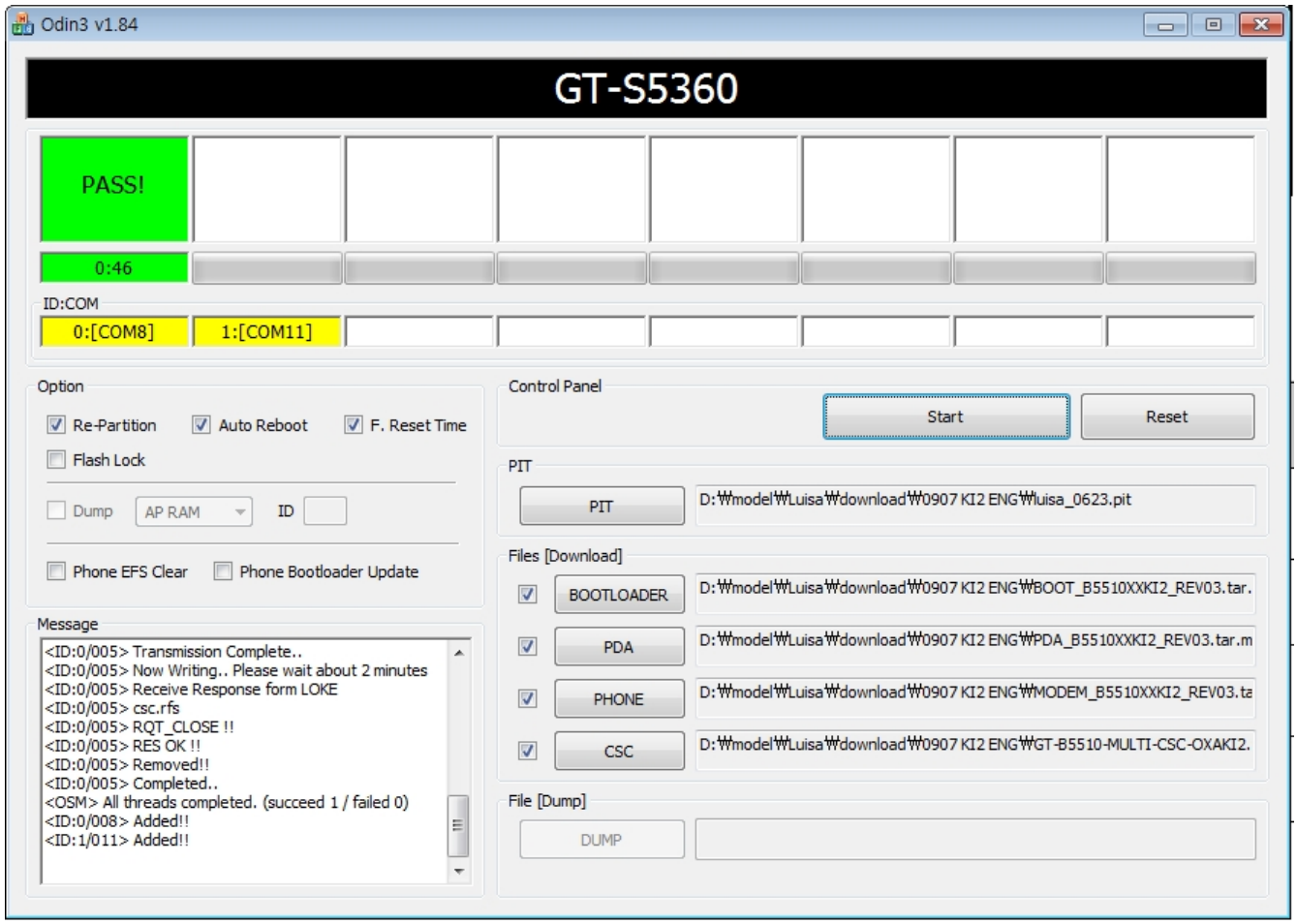
8. If you Click Start Button, download is started.
   And you can see "PASS!" with green when download is done.



9. Confirm the downloaded version name and etc. :

   ***#1234#**

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9. Reference Abbreviate

Reference Abbreviate

- **AAC**: Advanced Audio Coding.
- **AVC** : Advanced Video Coding.
- **BER** : Bit Error Rate
- **BPSK**: Binary Phase Shift Keying
- **CA** : Conditional Access
- **CDM** : Code Division Multiplexing
- **C/I** : Carrier to Interference
- **DMB** : Digital Multimedia Broadcasting
- **EN** : European Standard
- **ES** : Elementary Stream
- **ETSI**: European Telecommunications Standards Institute
- **MPEG**: Moving Picture Experts Group
- **PN** : Pseudo-random Noise
- **PS** : Pilot Symbol
- **QPSK**: Quadrature Phase Shift Keying
- **RS** : Reed-Solomon
- **SI** : Service Information
- **TDM** : Time Division Multiplexing
- **TS** : Transport Stream

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1. Safety Precautions

1-1. Repair Precaution

- Repair in Shield Box, during detailed tuning. Take specially care of tuning or test, because specipicty of cellular phone is sensitive for surrounding interference(RF noise).

- Be careful to use a kind of magnetic object or tool, because performance of parts is damaged by the influence of magnetic force.

- Surely use a standard screwdriver when you disassemble this product, otherwise screw will be worn away.

- Use a thicken twisted wire when you measure level.
  A thicken twisted wire has low resistance, therefore error of measurement is few.

- Repair after separate Test Pack and Set because for short danger (for example an overcurrent and furious flames of parts etc) when you repair board in condition of connecting Test Pack and tuning on.

- Take specially care of soldering, because Land of PCB is small and weak in heat.

- Surely tune on/off while using AC power plug, because a repair of battery charger is dangerous when tuning ON/OFF PBA and Connector after disassembling charger.

- Don't use as you pleases after change other material than replacement registered on SEC System. Otherwise engineer in charge isn't charged with problem that you don't keep this rules.

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1-2. ESD(Electrostatically Sensitive Devices) Precaution

Several semiconductor may be damaged easily by static electricity. Such parts are called by ESD (Electrostatically Sensitive Devices), for example IC,BGA chip etc. Read Precaution below. You can prevent from ESD damage by static electricity.

- Remove static electricity remained your body before you touch semiconductor or parts with semiconductor. There are ways that you touch an earthed place or wear static electricity prevention string on wrist.

- Use earthed soldering steel when you connect or disconnect ESD.

- Use soldering removing tool to break static electricity. , otherwise ESD will be damaged by static electricity.

- Don't unpack until you set up ESD on product. Because most of ESD are packed by box and aluminum plate to have conductive power,they are prevented from static electricity.

- You must maintain electric contact between ESD and place due to be set up until ESD is connected completely to the proper place or a circuit board.

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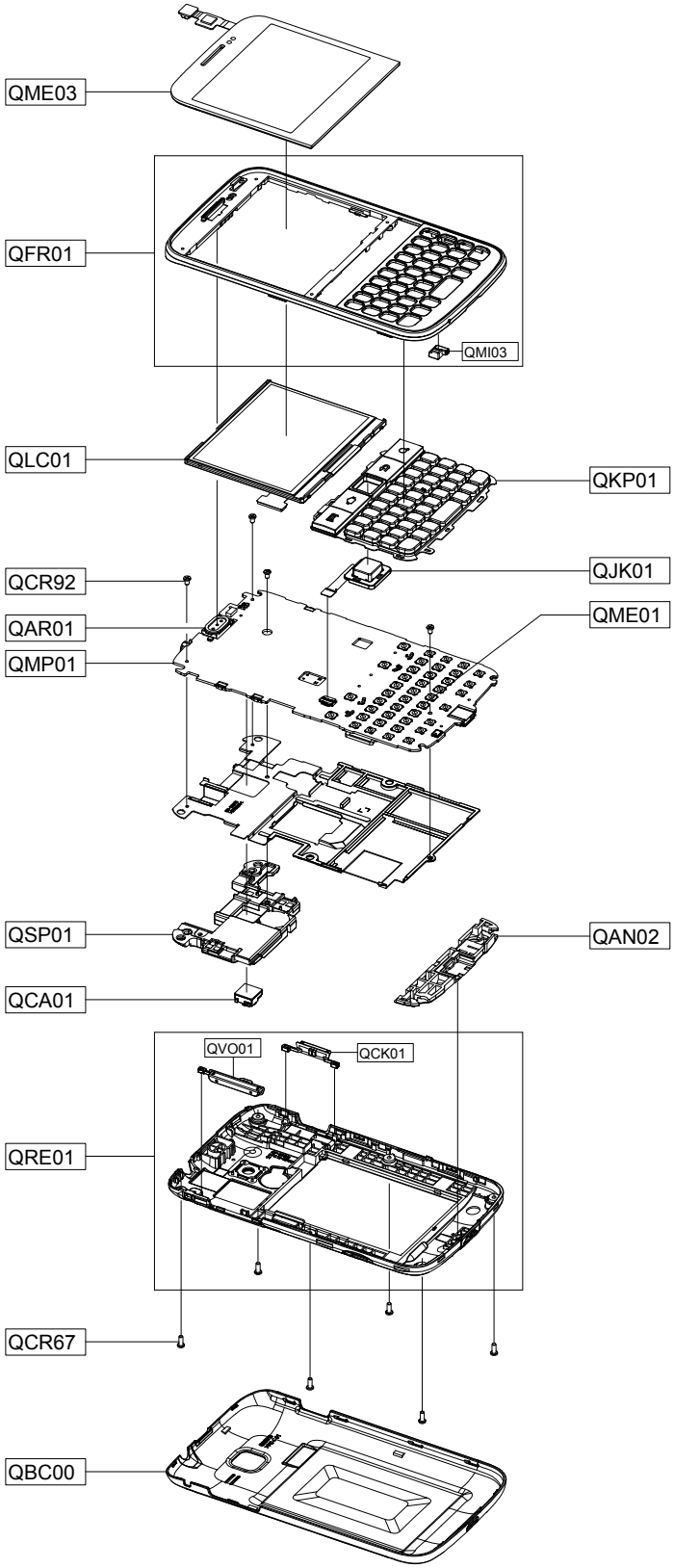
4. Exploded View and Parts List

4-1. Cellular phone Exploded View



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4-2. Cellular phone Parts list

Design LOC		Description	SEC CODE
QAR01		AUDIO-RECEIVER	3009-001569
QCR67		SCREW-MACHINE	6001-002083
QCR92		SCREW-MACHINE	6001-002261
QAN02		INTENNA-MAIN (GT-B5510)	GH42-03180A
QCA01		CAMERA MODULE-3M 1/5" FF SONY SOCKET	GH59-09965A
QJK01		MODULE-OPTICAL FINGER MOUSE	GH59-11299A
QME01		DOME SHEET-GT-B5510	GH59-11317A
QME03		TOUCH/PANEL-GT-B5510	GH59-11331A
QSP01		MODULE-SPK/MOT (GT-B5510)	GH59-11371A
QMP01		A/S ASSY-PBA MAIN (COMM)	GH82-06029A
QLC01		ELA MODULE-GT-B5510 LCD CKD	GH96-05394A
QBC00		ASSY COVER-BATT	GH98-20991A
QKP01		ASSY KEYPAD-(DUTCH/BLACK)	GH98-21613A
QRE01		ASSY CASE-REAR	GH98-20990A
	QVO01	PMO KEY-VOLUME	GH72-64964A
	QCK01	PMO KEY-POWER	GH72-64968A
QFR01		ASSY CASE-FRONT	GH98-20989A
	QMI03	ASSY RUBBER-MIC HOLDER	GH98-21652A

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5. MAIN Electrical Parts List

Design LOC	SEC CODE	Description
D401	0401-001110	SDS511Q
ZD400	0403-001870	TDZ5V6J
D600	0404-001646	PMEG4005EJ
ZD500,ZD509,ZD600	0406-001286	PESD5V0L5UV
ZD501,ZD502,ZD503	0406-001446	RD1301
ZD504,ZD505,ZD506	0406-001446	RD1301
ZD507,ZD510	0406-001446	RD1301
Q600	0505-001325	2SK3019
LED400,LED401,LED402	0601-002995	AEOWL-VODE
LED403	0601-002995	AEOWL-VODE
U300	0801-003016	NC7SV08L6X
U200	1001-001715	XM2400SB-DL1201
UME300	1108-000411	KAT007012C-BRTT
PAM101	1201-003092	SKY77705
U201	1201-003261	BGU7007
U100	1201-003266	RF3242
PAM100	1201-003303	RF7221
U604	1202-001088	NCS2220AMUT1G
U401	1203-005512	MIC5365-3.3YMT
U603	1203-005521	MIC5365-2.8YMT
U602	1203-006589	AAT1401IUQ-T1
U400	1203-006878	STC3105IQT
U402	1203-006913	MAX8986EWG-T
U403	1203-006938	RT9829GQW
U203	1205-003966	BCM4751IUB2G
U202	1205-004204	BCM4330XKFFBG
U101	1205-004267	BCM2091C0IFBG
UCP300	1205-004271	BCM21552KFFBG
U600	1209-002023	BMA222
U500	1209-002065	GP2AP002S00F
U601	1209-002079	MMC3280MA
V100	1404-001221	NCP15WB473J04RC
R618	2007-000138	RC1005J101CS
R300	2007-000140	RC1005J102CS
R321,R322,R336,R337	2007-000141	RC1005J222CS
C221,R504,R613	2007-000148	RC1005J103CS

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Design LOC	SEC CODE	Description
R600	2007-000153	RC1005J223CS
R412	2007-000156	RC1005J303CS
C611,R402,R413,R515	2007-000162	RC1005J104CS
R610	2007-000162	RC1005J104CS
R617	2007-000163	RC1005J124CS
R601	2007-000165	RC1005J204CS
R614	2007-000167	RMC16S-394J-TP
R602	2007-000168	RC1005J474CS
R324	2007-000169	TSR16GJ514V
R518,R603	2007-000170	RC1005J105CS
R406,R407,R508	2007-000172	RC1005J100CS
R403,R404,R405,R410	2007-000173	RC1005J220CS
R416	2007-000173	RC1005J220CS
R505	2007-001285	ERJ2GEJ5R6X
R100,R101,R110,R111	2007-001298	RC1005J510CS
R317,R320	2007-001316	MCR01MZP5J821
R105,R414,R415	2007-003015	MCR01MZP5J2R2
R604	2007-007014	MCR01MZP5J513
R325	2007-007015	RC1005J133CS
R507	2007-007107	RC1005F1003CS
R200,R606	2007-007132	RC1005F153CS
R114	2007-007312	MCR01MZP5F2002
R501	2007-007317	RK73H1ETP2201F
R615	2007-007334	RC1005F2003CS
R616	2007-007529	RK73H1ETP9102F
R309,R316	2007-007590	RK73H1ETP8202F
R310	2007-007698	RK73H1ETP5101F
R334	2007-008045	ERJ1GEJ101C
R113	2007-008048	ERJ1GENJ201X
R112	2007-008056	RC0603J331CS
R323	2007-008213	ERJ2RKF4301X
R333	2007-008401	RC1005F754CS
R335	2007-008517	RC1005F2403CS
C102,C106,C201,C228	2203-000233	GRP1555C1H101J
C348	2203-000233	GRP1555C1H101J
C312,C313,C314,C317	2203-000254	GRP155R71C103K

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Design LOC	SEC CODE	Description
C318,C320,C323,C326	2203-000254	GRP155R71C103K
C327,C328,C334,C337	2203-000254	GRP155R71C103K
C214,C220,C224,C423	2203-000278	GRP1555C1H100D
L114	2203-000386	GRP1555C1H150J
C231,C331,C332,C346	2203-000438	GRP155R71H102K
C347,R201	2203-000438	GRP155R71H102K
C150,C151	2203-000489	GRP155R71H222K
C236,C513,C514	2203-000585	GRP155R71H221KD01E
C244,C416	2203-000627	GRM1555C1H220J
C526	2203-000679	GRP1555C1H270J
C104,C118,C227,C235	2203-000812	GRP1555C1H330J
C450,C451,C520	2203-000812	GRP1555C1H330J
C225	2203-000940	GRP155R71H471K
C113,C449,C519	2203-000995	GRP1555C1H470J
C103	2203-001017	GRP1555C1H4R0C
C203	2203-001385	GRP1555C1H1R5CZ01E
C108	2203-002668	C1005CG1H0R5BT
C127	2203-005052	GRP1555C1H3R3CZ01E
C110	2203-005234	GRP1555C1H1R2CZ01E
C222	2203-005480	GRP155R71A333KA01E
C612	2203-005481	GRP155R71A473KA01E
C117	2203-005729	CL03C150JAGC
C135	2203-005731	GRM0335C1E180J
C205	2203-005777	CL03C010CA3GNNC
C212,C216,C217,C218	2203-006048	GRM155R71A104K
C219,C300,C301,C303	2203-006048	GRM155R71A104K
C305,C306,C307,C308	2203-006048	GRM155R71A104K
C309,C310,C311,C315	2203-006048	GRM155R71A104K
C316,C322,C325,C338	2203-006048	GRM155R71A104K
C339,C340,C341,C343	2203-006048	GRM155R71A104K
C349,C407,C424,C446	2203-006048	GRM155R71A104K
C447,C501,C516,C517	2203-006048	GRM155R71A104K
C600,C601,C605,C607	2203-006048	GRM155R71A104K
C621	2203-006048	GRM155R71A104K
C116	2203-006123	GRM0335C1E5R6CD01D
C247	2203-006194	GRP033R70J103KA01E

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Design LOC	SEC CODE	Description
C503,C504	2203-006208	CM105X5R475M06AT
C213	2203-006260	GRM155R61A224KE19E
C200,C202,C204,C206	2203-006305	CM03CG100J25AH
C302,C408,C425,C426	2203-006399	GRM155R60J105KE19D
C430,C431,C433,C434	2203-006399	GRM155R60J105KE19D
C435,C436,C437,C438	2203-006399	GRM155R60J105KE19D
C440,C441,C442,C502	2203-006399	GRM155R60J105KE19D
C505,C531,C602,C603	2203-006399	GRM155R60J105KE19D
C606,C622,C623	2203-006399	GRM155R60J105KE19D
C130,C132,C136,C143	2203-006423	GRM33X5R104K6.3
C148	2203-006423	GRM33X5R104K6.3
C133,C134,C137,C145	2203-006556	GRM0335C1E470JD01D
C401,C412,C413,C524	2203-006562	CV05X5R105K10AH
C525	2203-006562	CV05X5R105K10AH
C101,C125	2203-006611	GRM0335C1E2R7CD01D
C115,C129,C207,C209	2203-006824	CV105X5R475K10AT
C210,C211,C232,C406	2203-006824	CV105X5R475K10AT
C420,C421,C422,C610	2203-006824	CV105X5R475K10AT
C241	2203-006839	CL03A104KP3NNNC
C223,C432,C443	2203-006841	CV05X5R105K16AH
C409,C411,C417,C419	2203-006844	CV05X5R474K10AH
C238,C239,C242,C243	2203-006872	GRM155R60J225ME15D
C608	2203-006978	GMK107BJ105KA-T
R210	2203-007194	CL03C6R8BA3GNNC
C522	2203-007240	CL10A226MQ8NRNE
C111,C240	2203-007270	CL10A106KP8NNNC
C131,C208,C304,C342	2203-007271	CL05A225KP5NSNC
C427,C428,C429,C439	2203-007271	CL05A225KP5NSNC
C444	2203-007271	CL05A225KP5NSNC
C400,C404,C405,C445	2203-007279	CV105X5R106M10AT
C448,C604	2203-007279	CV105X5R106M10AT
C618,C619,C620	2203-007317	CV05X5R475M06AH
C139,C140	2203-007393	CL05A475KP5NRNC
C138,C141,C142,C144	2203-007449	CV03X5R105M06AH-SAM
C402,C452,C456	2203-007456	CL05A105KA5NQNC
C226	2203-007760	GRM1555C1H1R5B

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Design LOC	SEC CODE	Description
TA400	2404-001506	TCTP1A476M8R-D
L206	2703-001708	HK1005-5N6K-T
L205	2703-001726	LL1005-FH27NJ
L207	2703-001737	LL1005-FH2N7S
L103	2703-001938	LL1005-FH56NJ
L101	2703-002170	CIH05T6N8JNC
C119	2703-002176	CIH05T2N7SNC
L100	2703-002198	CIH05T10NJNC
L107,L109,L113	2703-002199	CIH05T12NKNC
L112	2703-002200	CIH05T18NJNC
R109	2703-002205	CIH05T3N9KNC
L104,L111	2703-002208	CIH05T2N2SNC
C233,L200	2703-002269	CIH05T56NJNC
C100,C105,C109,L105	2703-002281	CIH05T5N6SNC
C500	2703-002309	CIH05T82NJNC
L102	2703-002367	CIH05T1N0SNC
C149,L120,L124	2703-002858	HK0603-4N7S-T
L118	2703-002901	LLV0603-F15NJ
L116	2703-002903	LLV0603-F10NJ
L126,L128	2703-002999	CIH03T22NJNC
L115	2703-003121	MLG1005SR15J
L601	2703-003485	CIG22L100MNE
L210	2703-003545	LQM2MPN2R2NG0
L400,L401,L402	2703-003686	CIG21L2R2MNE
L504	2703-003878	CIG10WR27MNC
L212	2703-003916	CML0306-3N9-BNH
L121,L122,L123,L125	2703-004014	LQP03TN1N2B02D
L117	2703-004036	LQP03TN12NJ02D
L119	2703-004037	LQP03TN2N7B02D
R400,R401	2703-004212	LQG15HS56NJ02D
OSC400	2801-004902	ST3215SB32768E0HPWBB
OSC100	2801-005083	SQ2D02600B2IBG
OSC200	2809-001371	SME3066B
F602,F605	2901-001454	AVRC-14S-03Q-030-050R
F600,F601,F603,F604	2901-001639	ADF-10S-03Q-100-040F
F606	2901-001639	ADF-10S-03Q-100-040F

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Design LOC	SEC CODE	Description
F101	2904-001633	SFH881PQ101
F202	2904-001696	SFDG75AQ101
F201	2904-001929	SFDG75BQ102
F103	2904-001937	SFWG42MY002
F200	2909-001324	TBF-1608-245-R7
F102	2910-000136	B7921
F100	2910-000147	SAYRF1G95HJ0F0A
MIC500	3003-001136	SPU0410HR5H
L209	3301-001438	BLM15BB750SN1D
L211	3301-001659	BLM15AG601SN1
L602	3301-001756	BLM15HG102SN1D
L201,L202,L204	3301-001778	BLM03AG241SN1D
L500,L501,L502,L503	3301-001885	BLM15HD182SN1D
L505	3301-001885	BLM15HD182SN1D
L203,L208	3301-001895	BLM03AG601SN1D
L600	3301-002062	BLM18HE102SN1D
TAC500,TAC501,TAC502	3404-001410	LS12M2E-T
RFS100	3705-001731	KMS-560-002-BEF
HDC600	3708-002283	FH26-13S-0.3SHBW(21)
CD500	3709-001575	SCHA4B0301
SIM500	3709-001623	5000-6P-1.6M
SOC600	3710-003306	3D1201087-ST32-7H
HEA600	3711-007295	AXE634124AW1
BTC400	3711-007393	KQ03SB2-3R
HDC601	3711-007762	AXT410124AW1
ANT100,ANT101,ANT200	3712-001348	HJ-ICT-05Y
ANT201,MOT400,MOT401	3712-001348	HJ-ICT-05Y
SPK500,SPK501	3712-001348	HJ-ICT-05Y
IFC400	3722-003065	HY07-AB0721
EAR500	3722-003373	IJAN4-142

Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

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7. Level 2 Repair

7-1. Disassembly and assembly Instructions

7-1-1. Disassembly

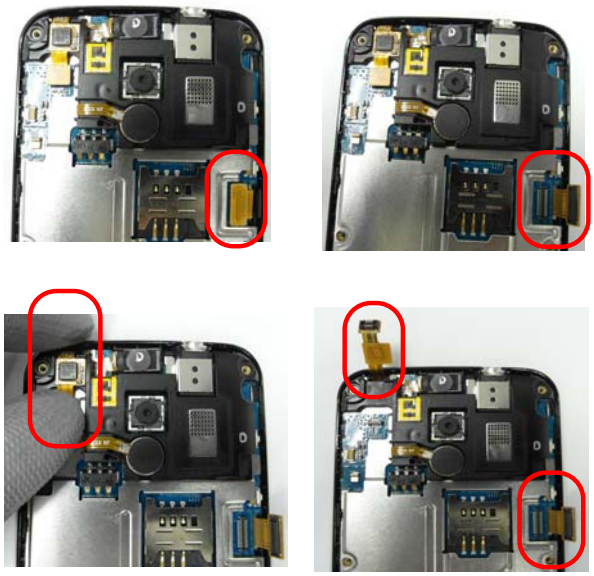
1 Unscrew Rear Case

Unscrew 6 points on Rear Case.
(Torque=1.2 kgf*cm)

2 Separate the Rear Case

Separate Rear part corner using
a decomposition tool.

3 Separate 2 connectors.



Separate 2 connectors from the PBA with care.

4 Separate the PBA from Front Ass'y.

Lift the Hook & Separate the PBA from Front Ass'y.

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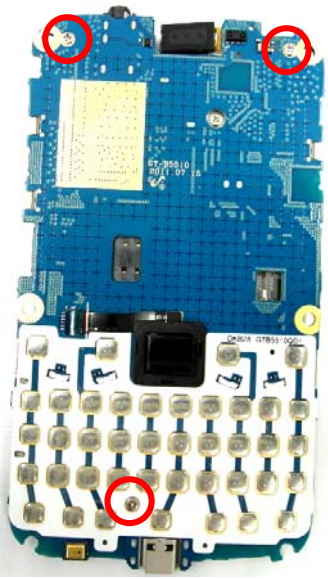
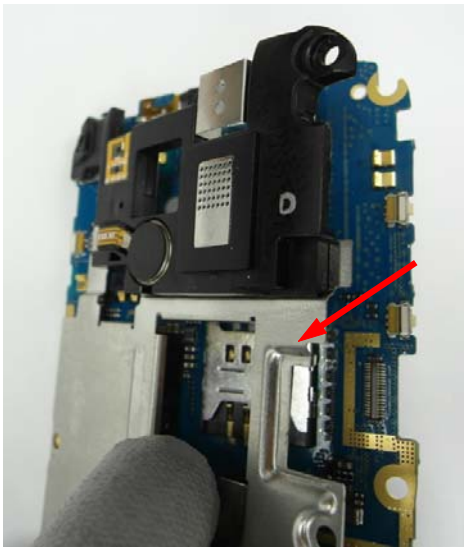
5 Unscrew PBA	**6** Separate Shield Can
	
Unscrew 4 points on the PBA. **(Torque=1.2 kgf*cm)**	Separate the Shield Can.
7 END	

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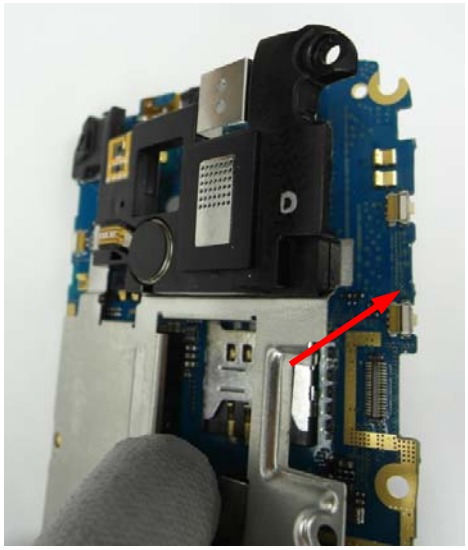
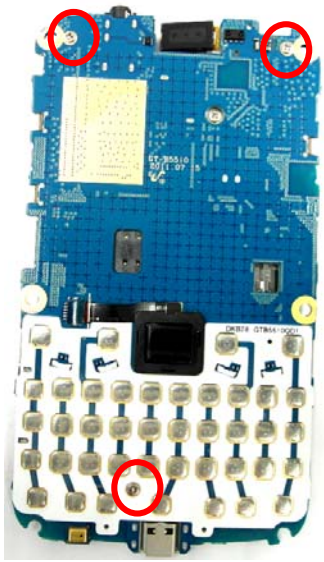
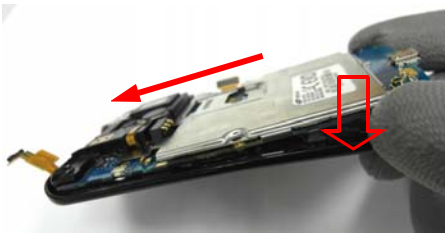
7-1-2. assemble

1 READY	2 Assemble the Shield-Can
	
READY	Insert the Shield-Can on PBA
3 Screw on PBA	**4** Assemble the PBA to FRONT Ass'y.
	
Screw 3 points on the PBA. **(Torque=1.2 kgf*cm)**	Place PBA carefully on hook.

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5 Assemble the PBA to FRONT Ass'y. 	**6** Assemble the Rear Case
Assemble the LCD Connector & TSP Connector.	Assemble the Rear Case to FRONT Ass'y.
7 Screw REAR 6-point 	
Land REAR on PBA and screw REAR 6-point. **(Torque=1.2 kgf*cm)**	

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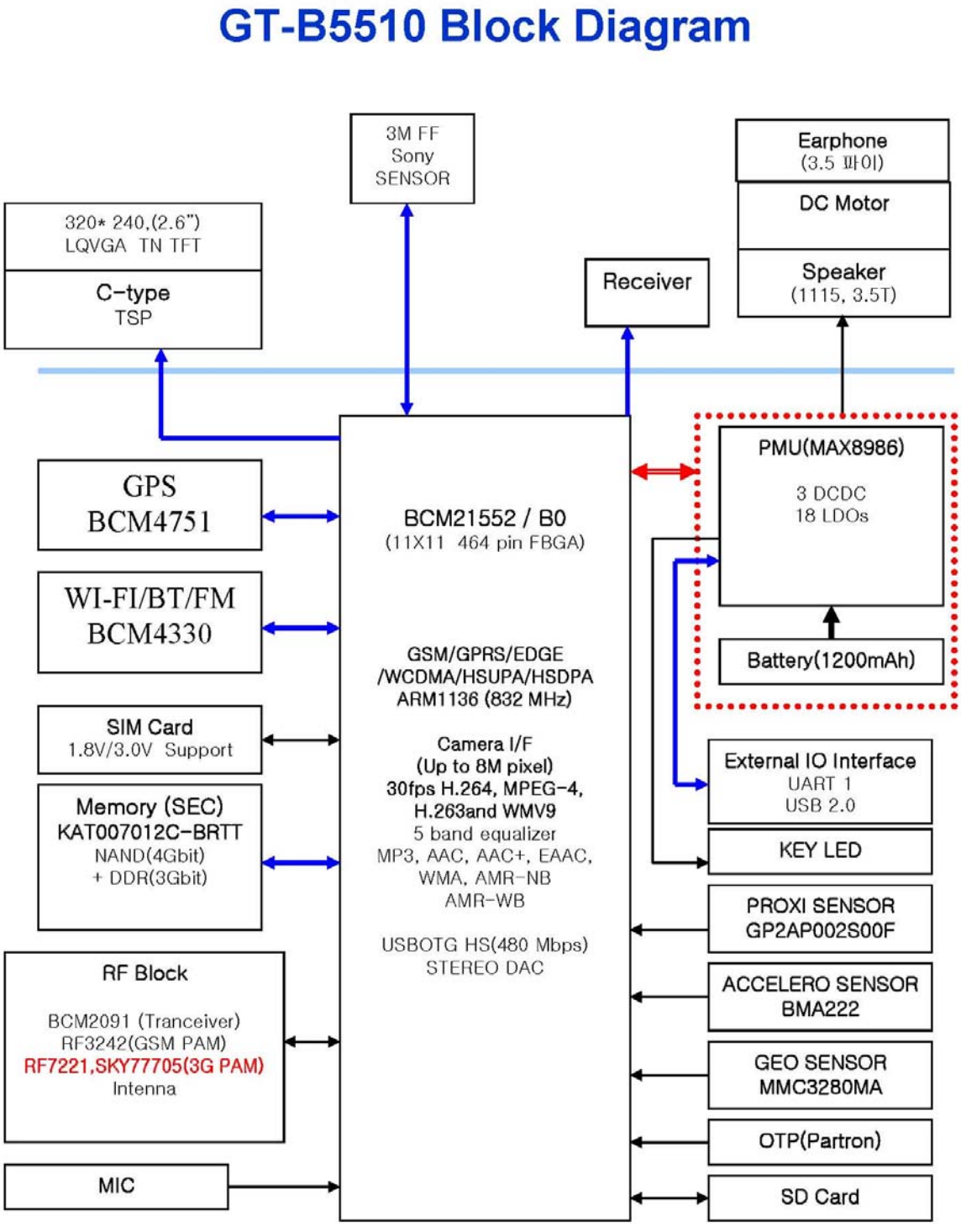
8. Level 3 Repair

8-1.Block Diagram



1

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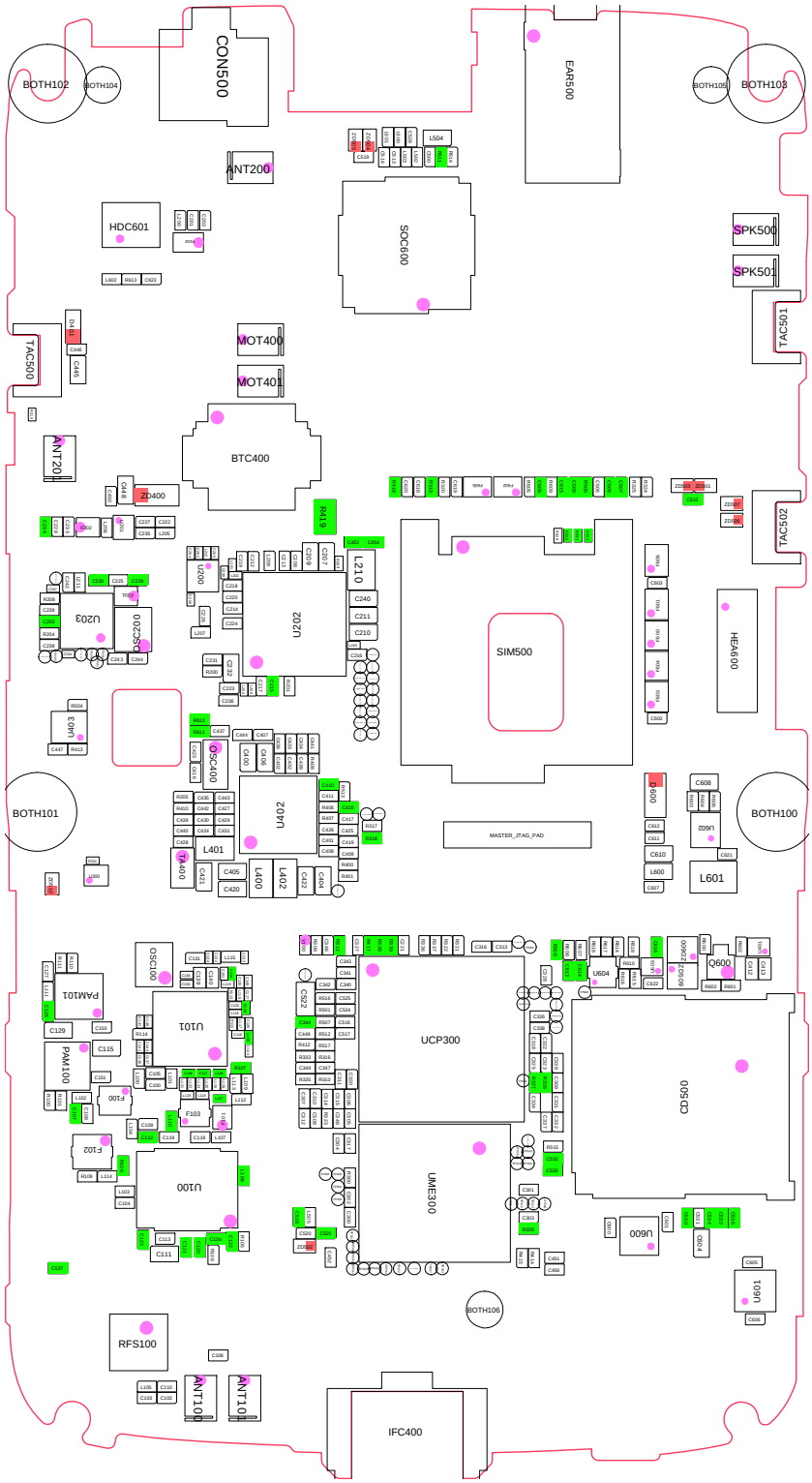
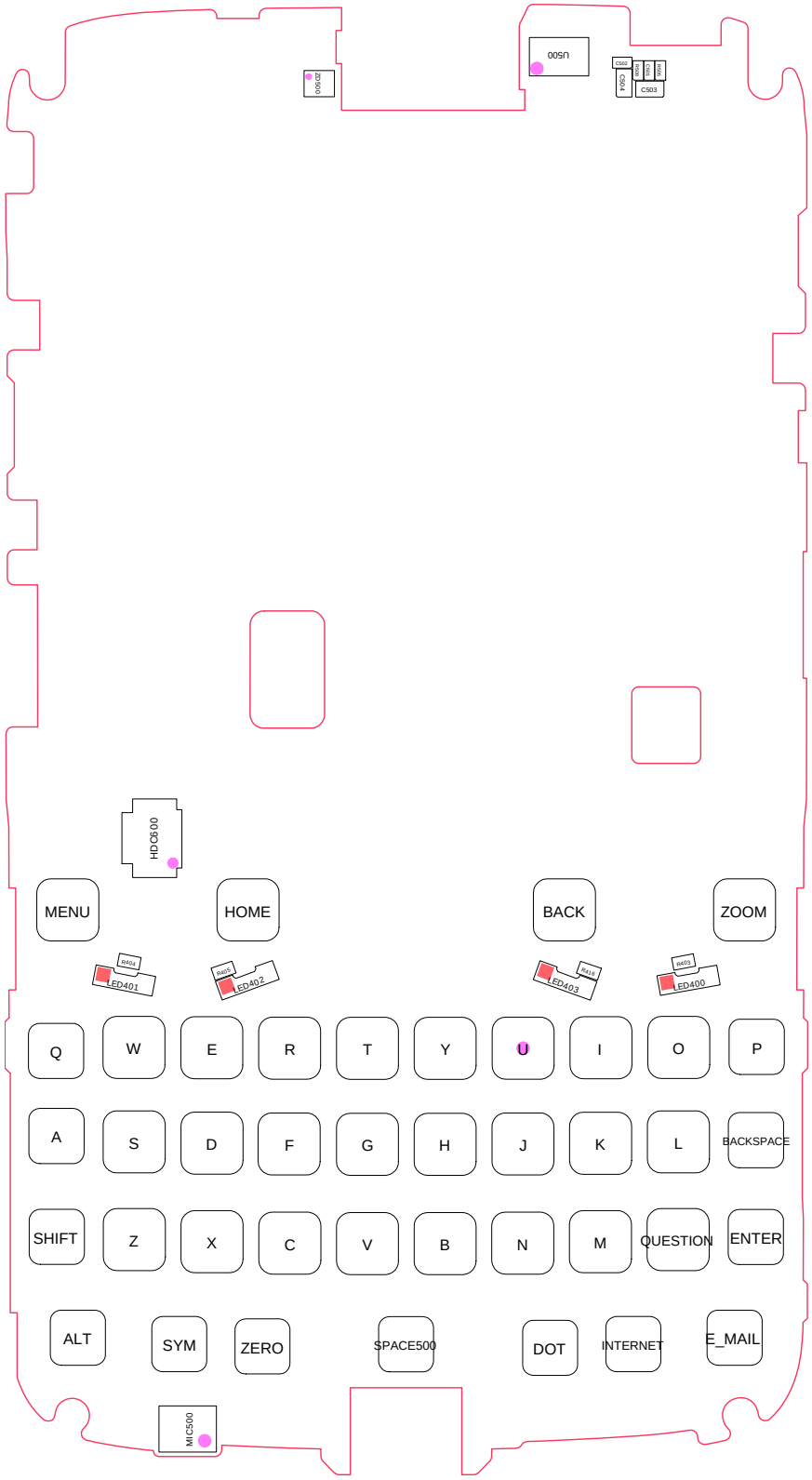
8-2. PCB Diagrams

8-2-1. Top



8-2-1. Bottom



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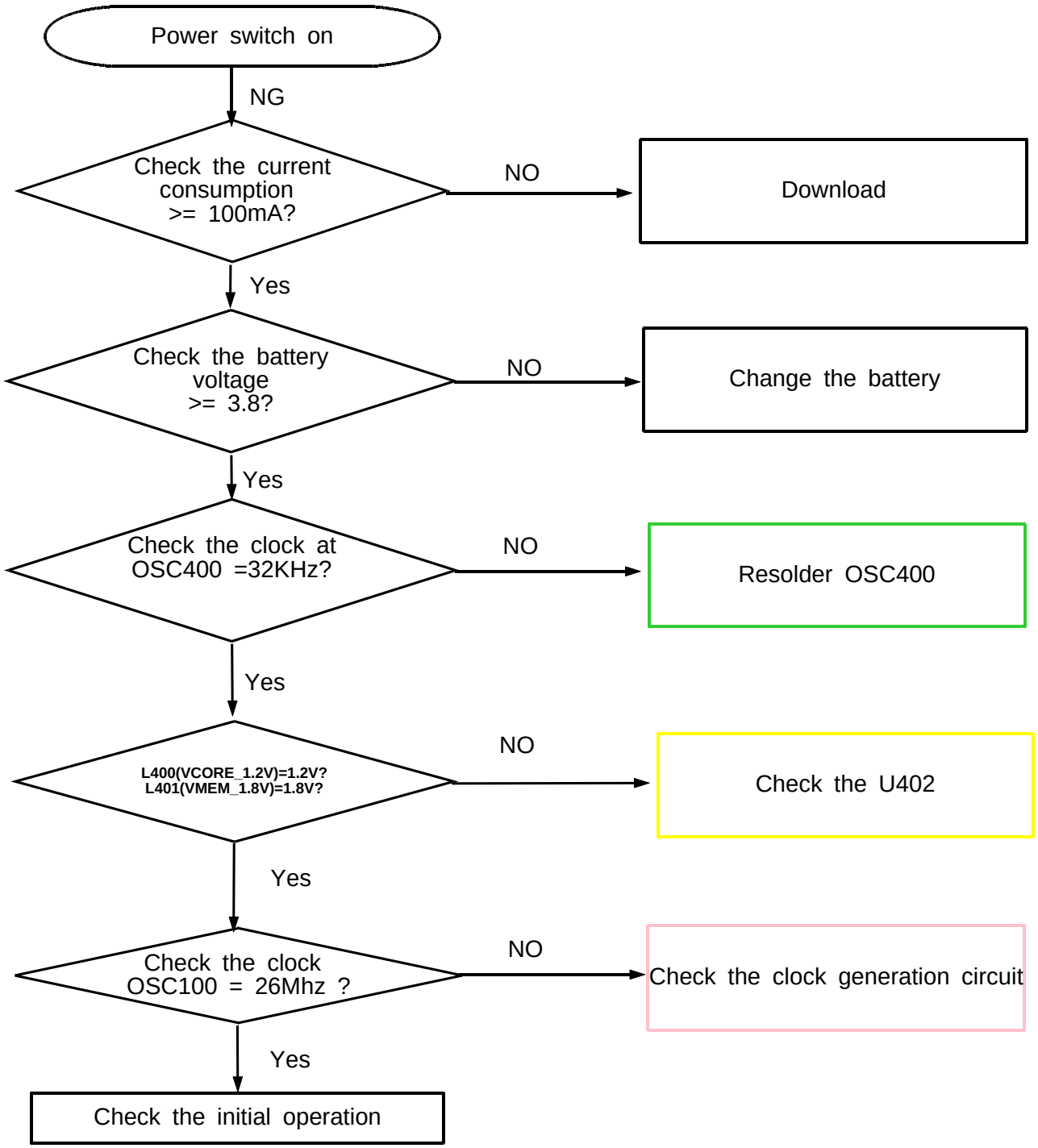
8-3. LOGIC

8-3-1. Power On



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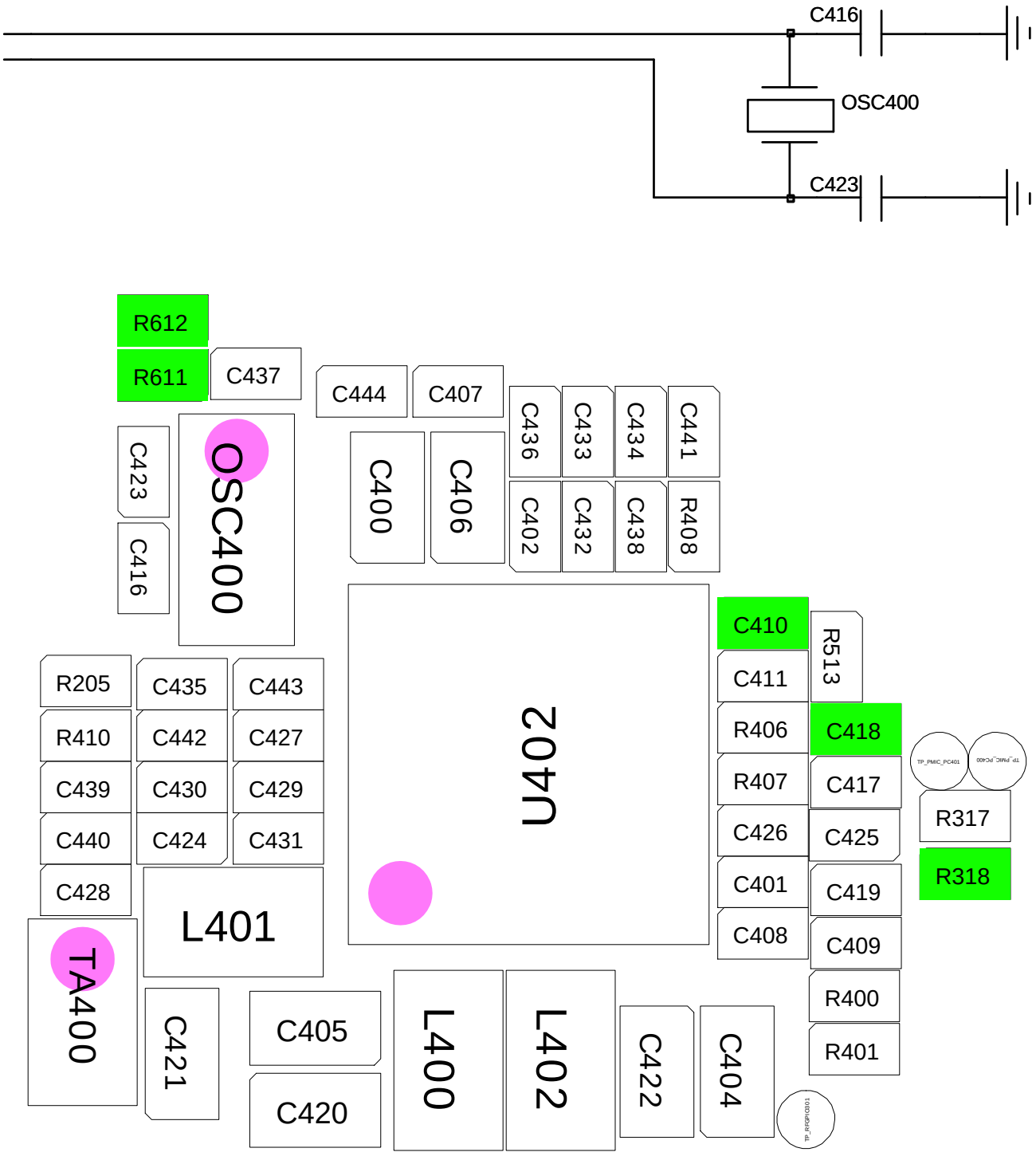

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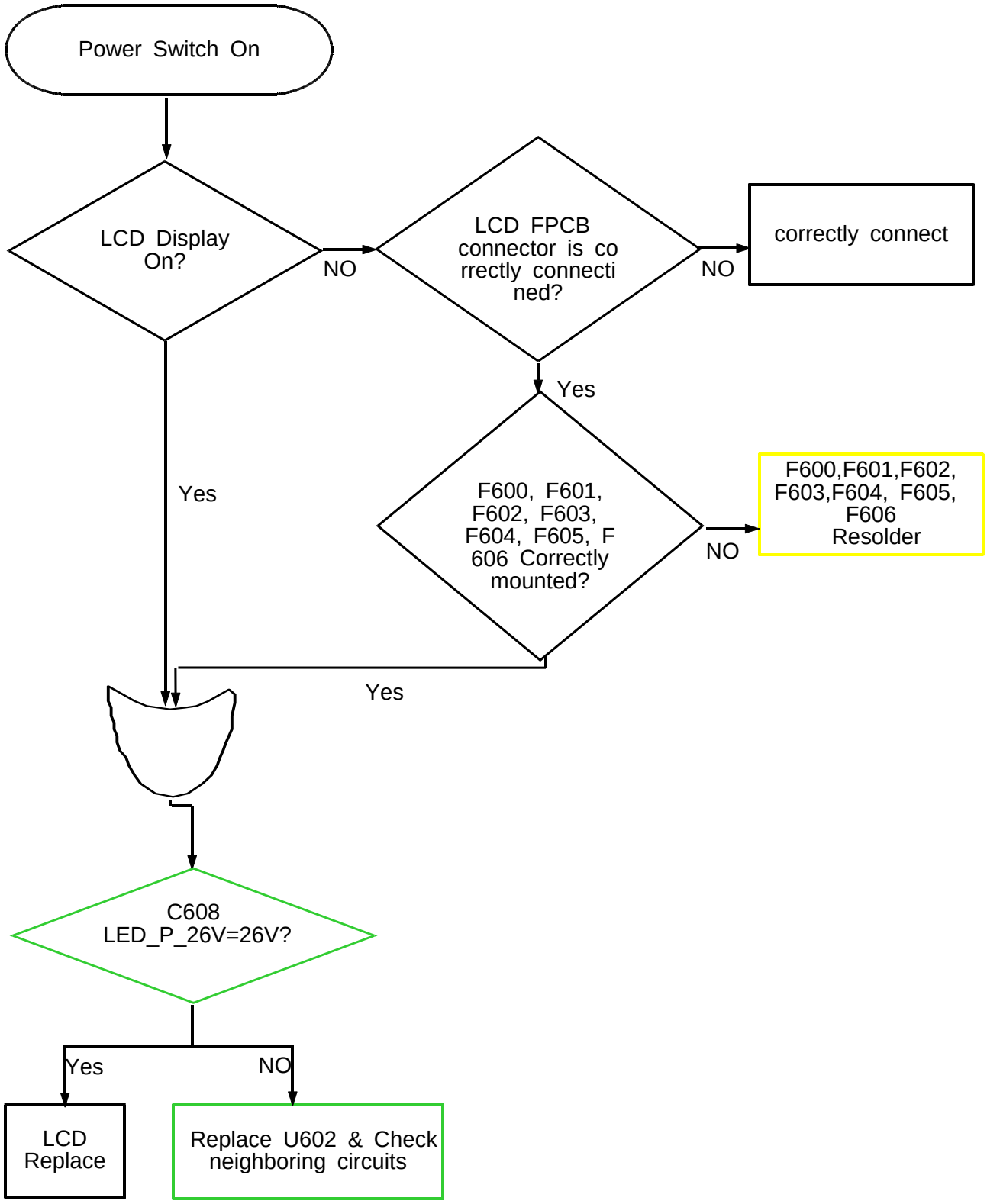
8-3-2. LCD Working



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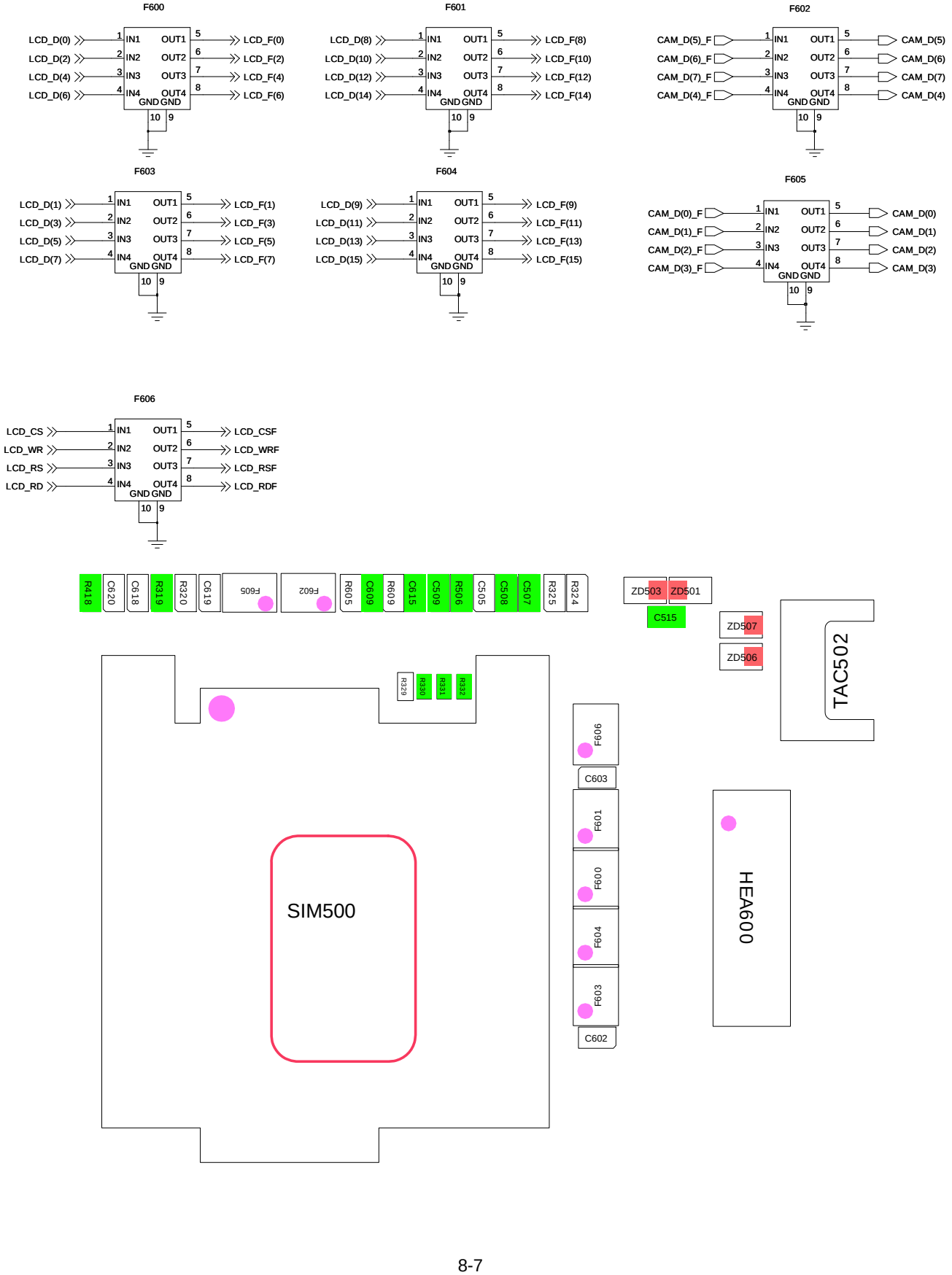

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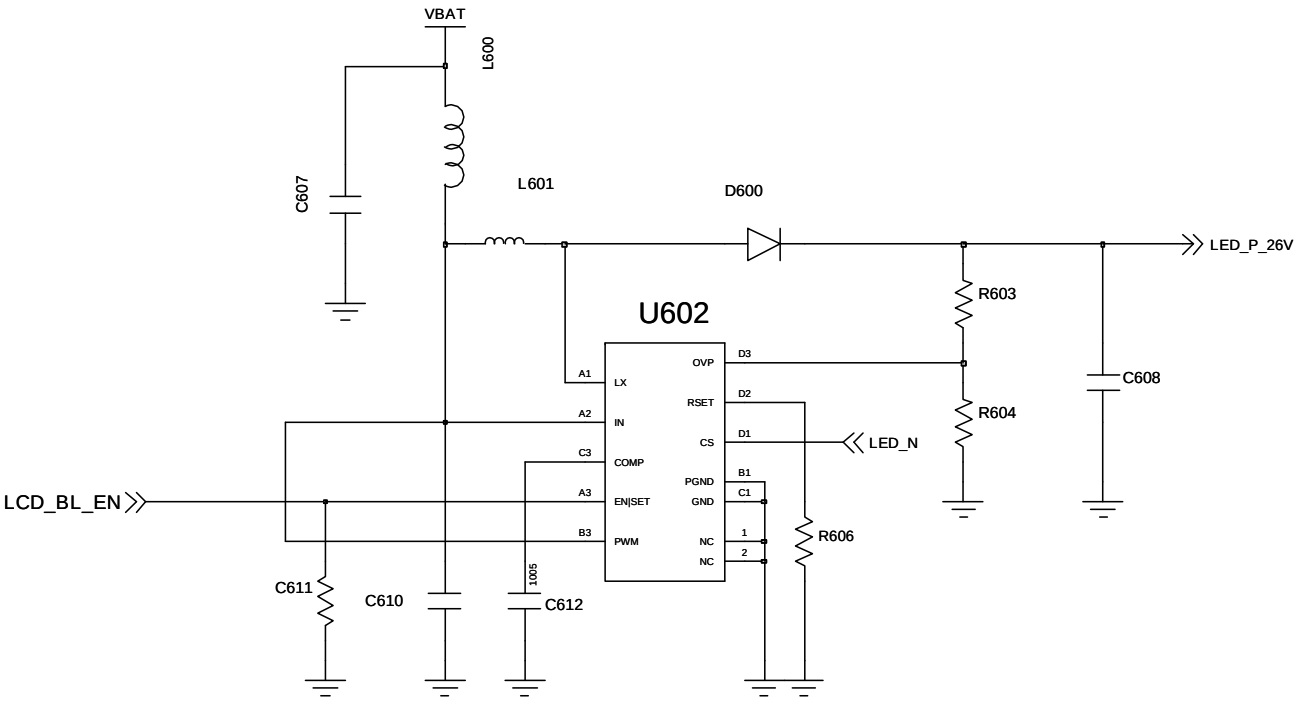

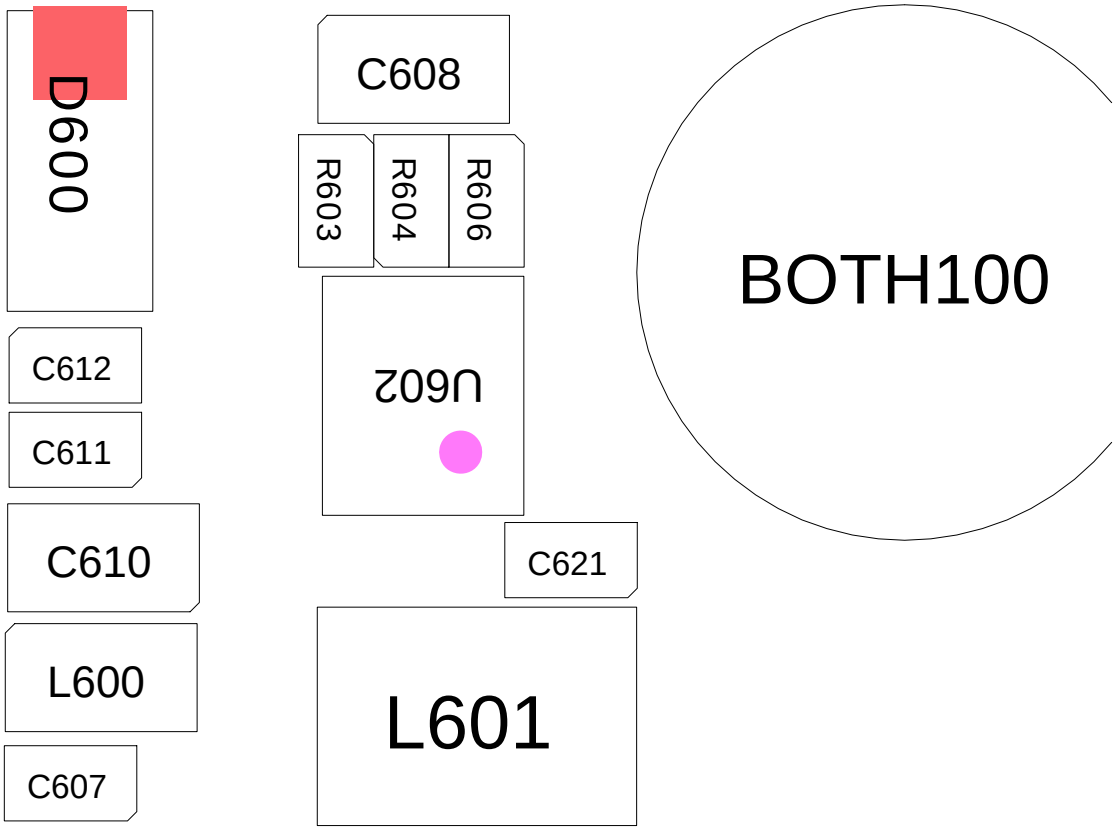

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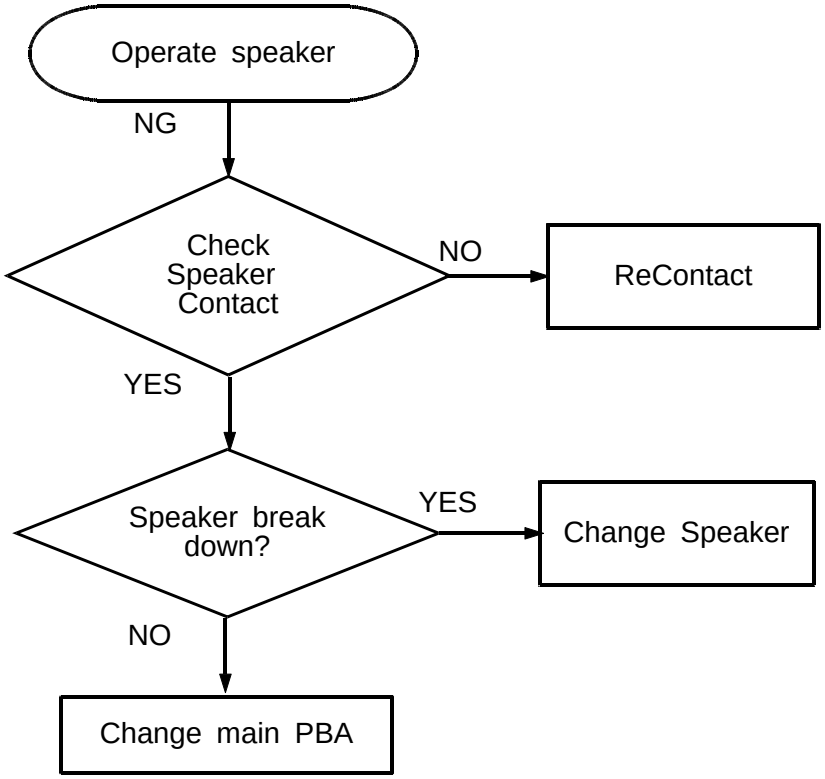
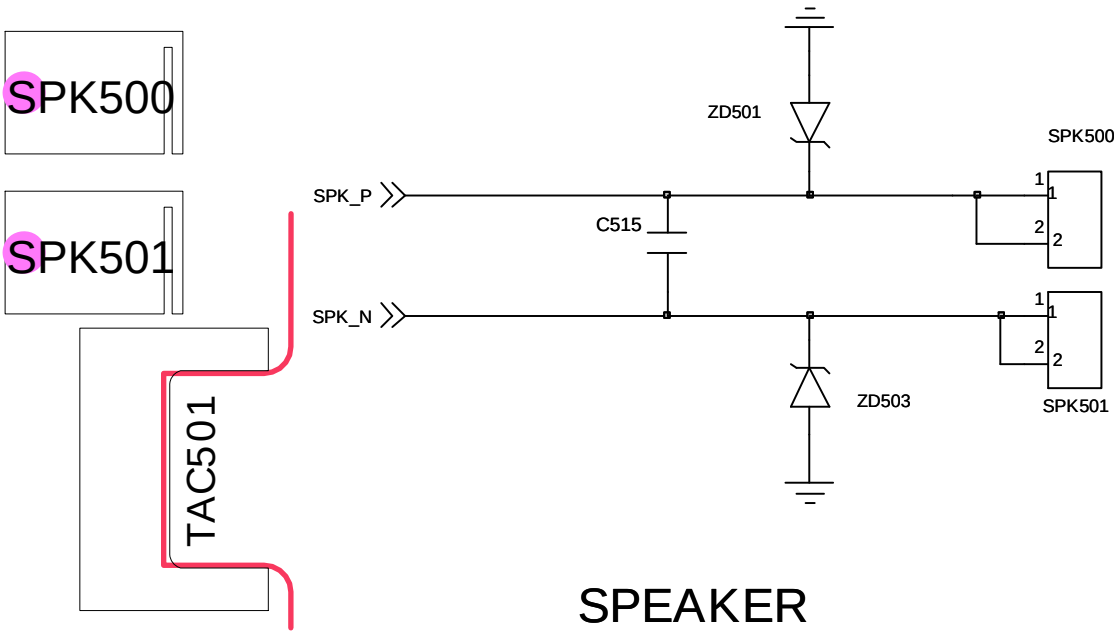
8-3-3. Audio Working

- Speaker Working





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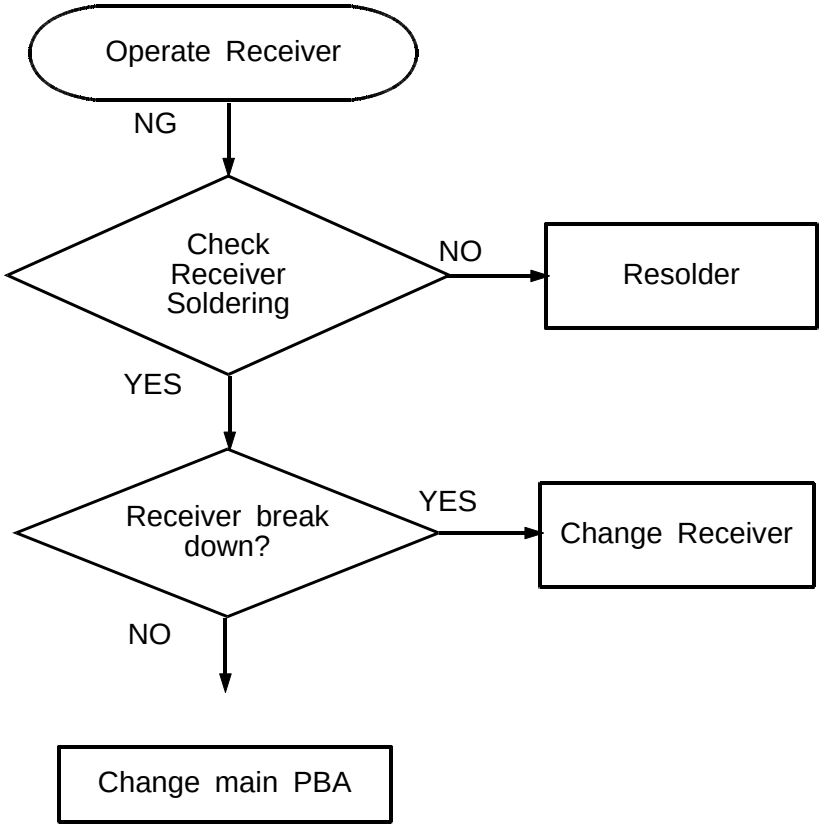
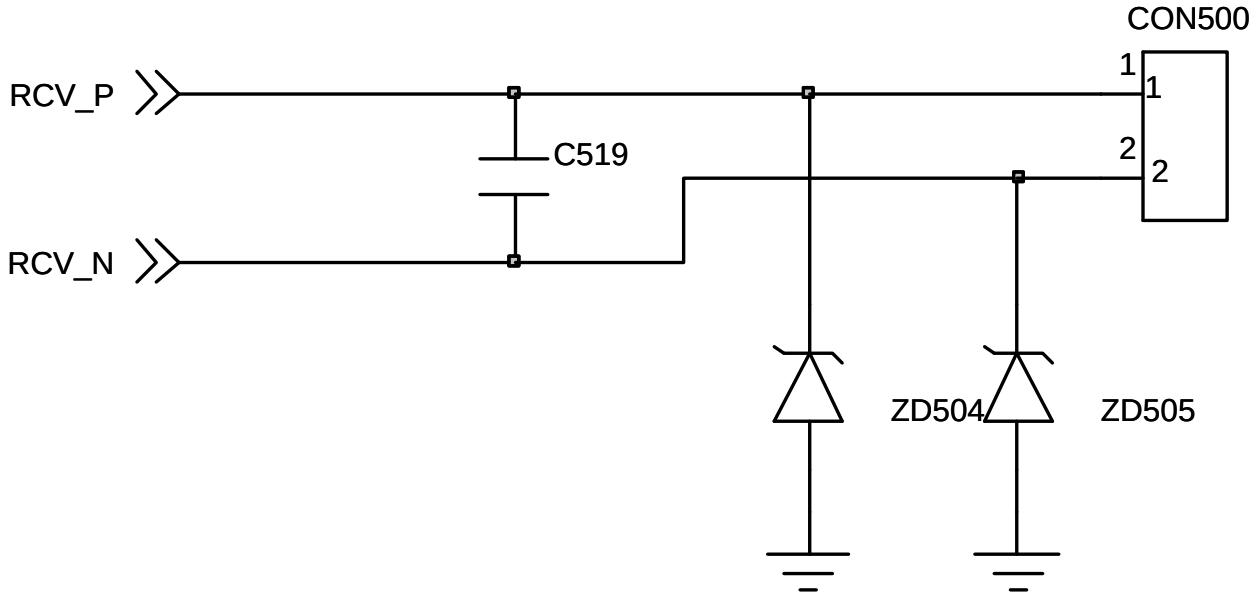
■ Receiver Working





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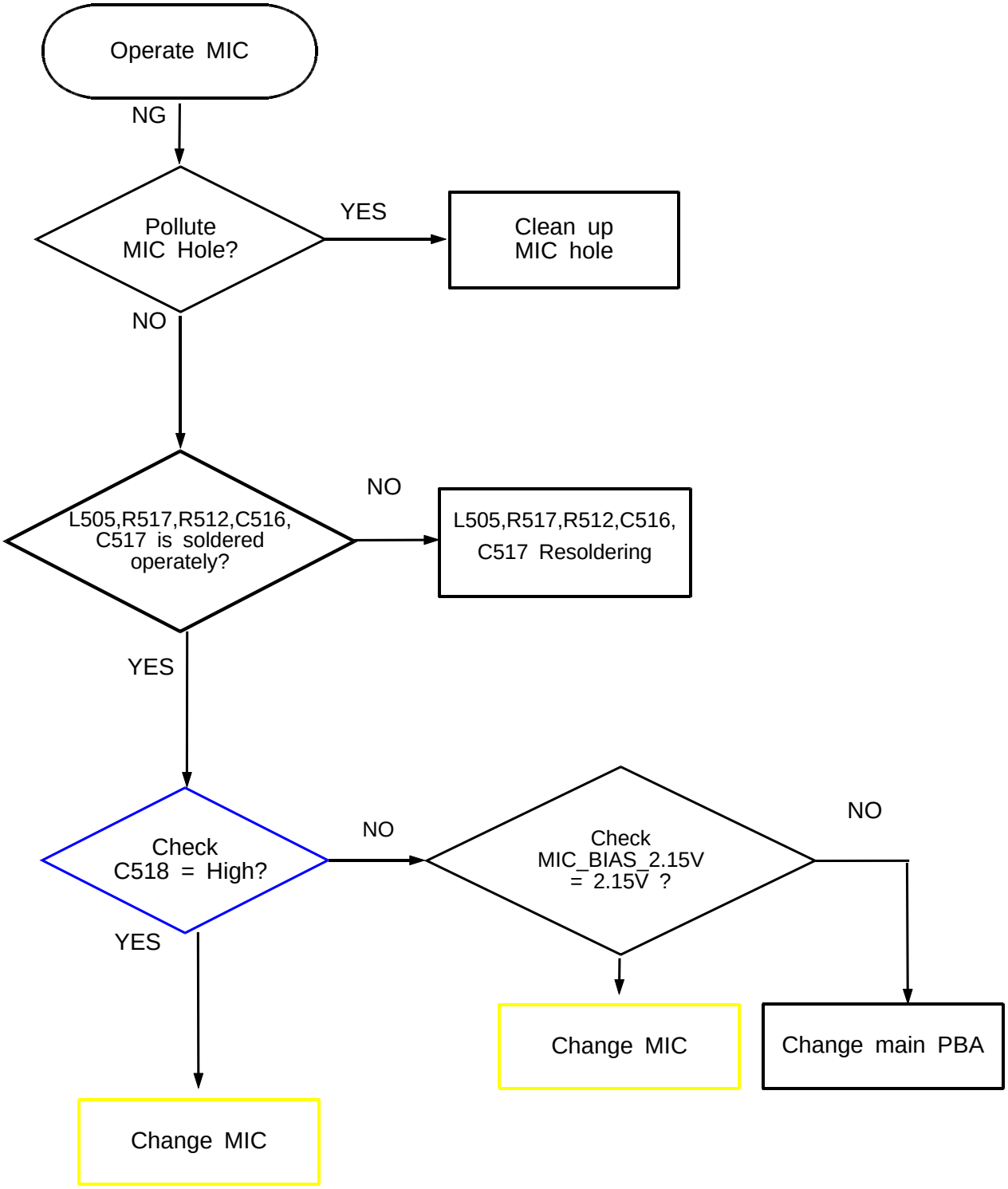
- Main MIC Working



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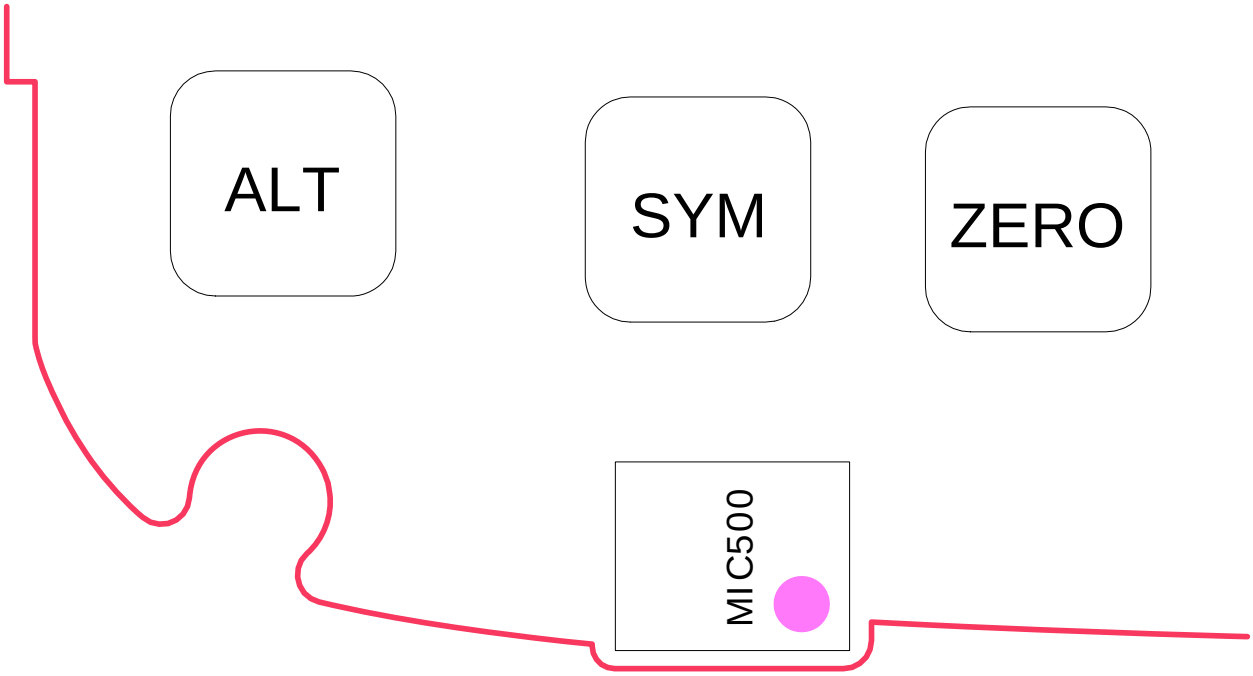

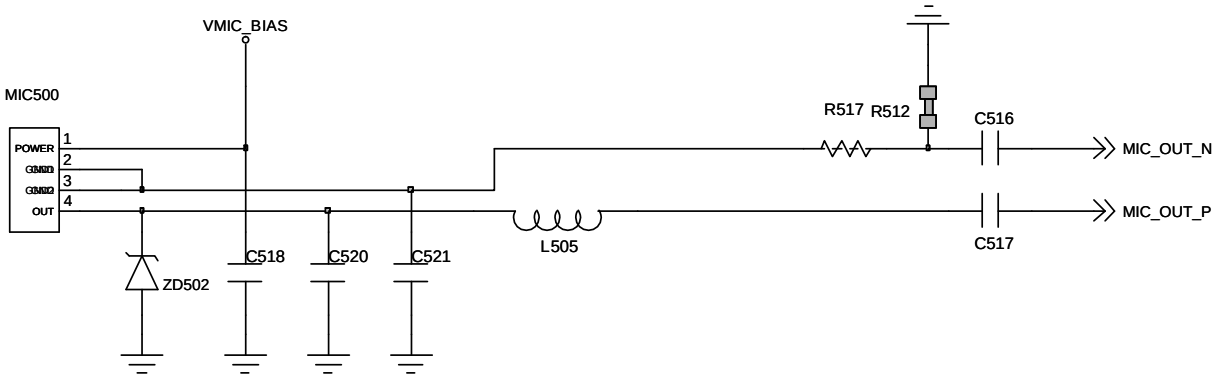

MAIN MIC

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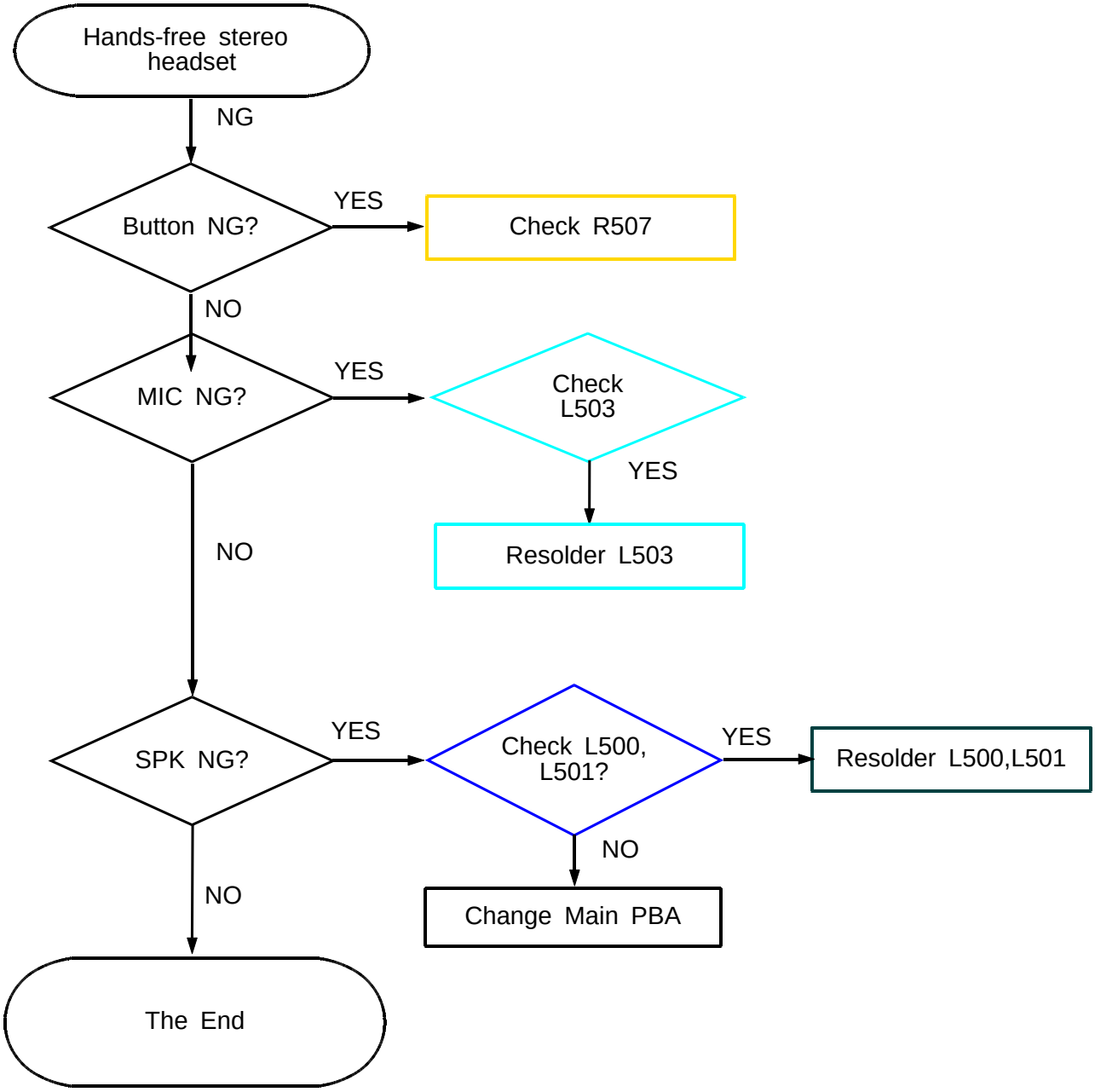
■ Stereo Headset Working



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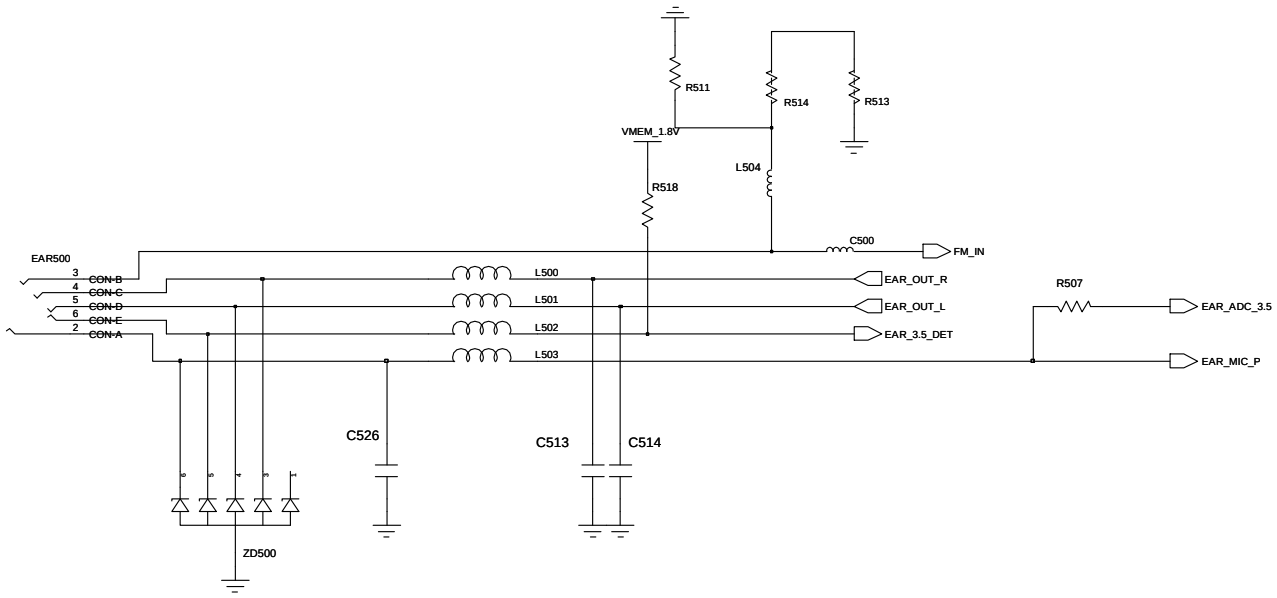

3.5 PHI EARJACT

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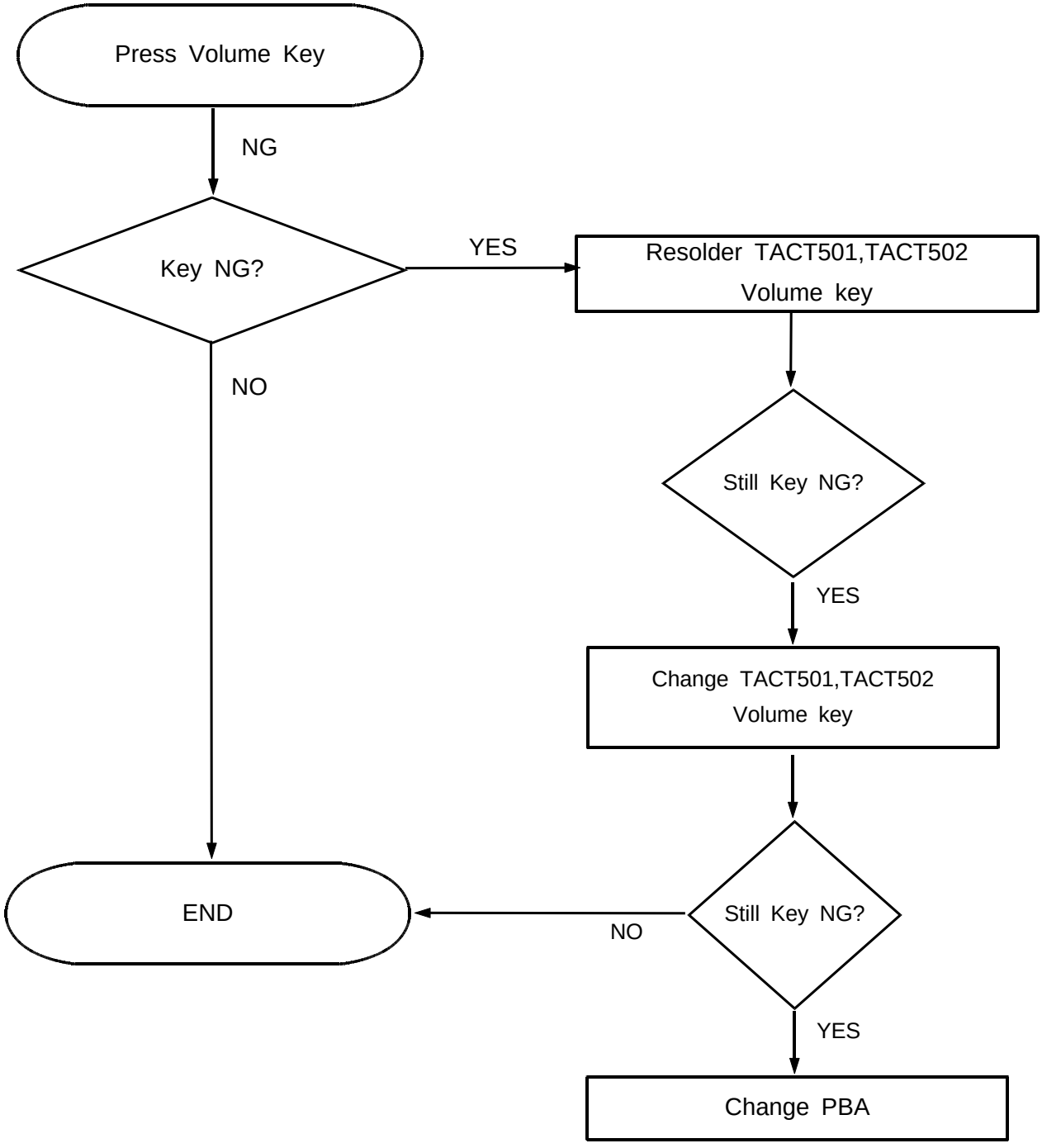
8-3-4. KEY Working

- Volume KEY



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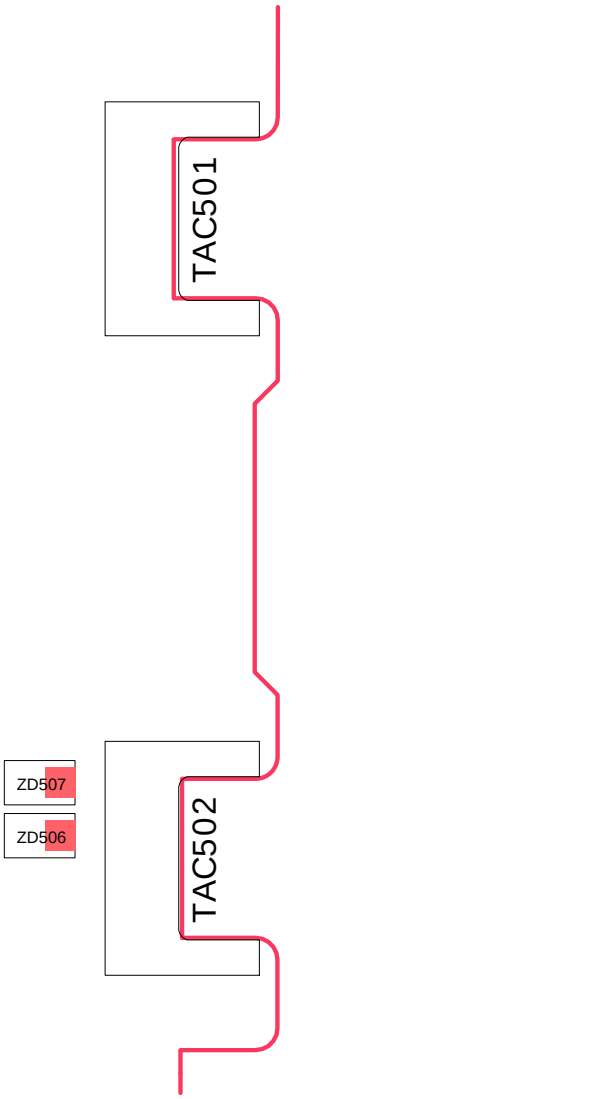

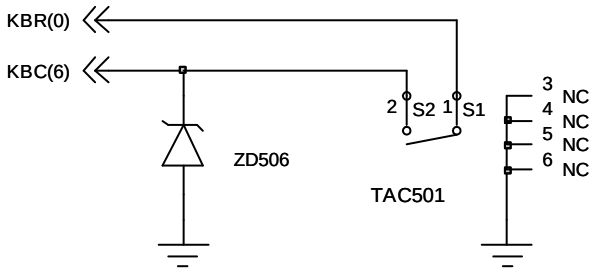

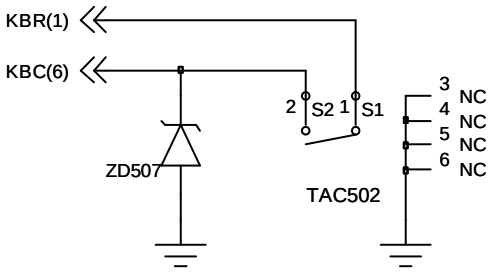

VOL UP

VOL DOWN

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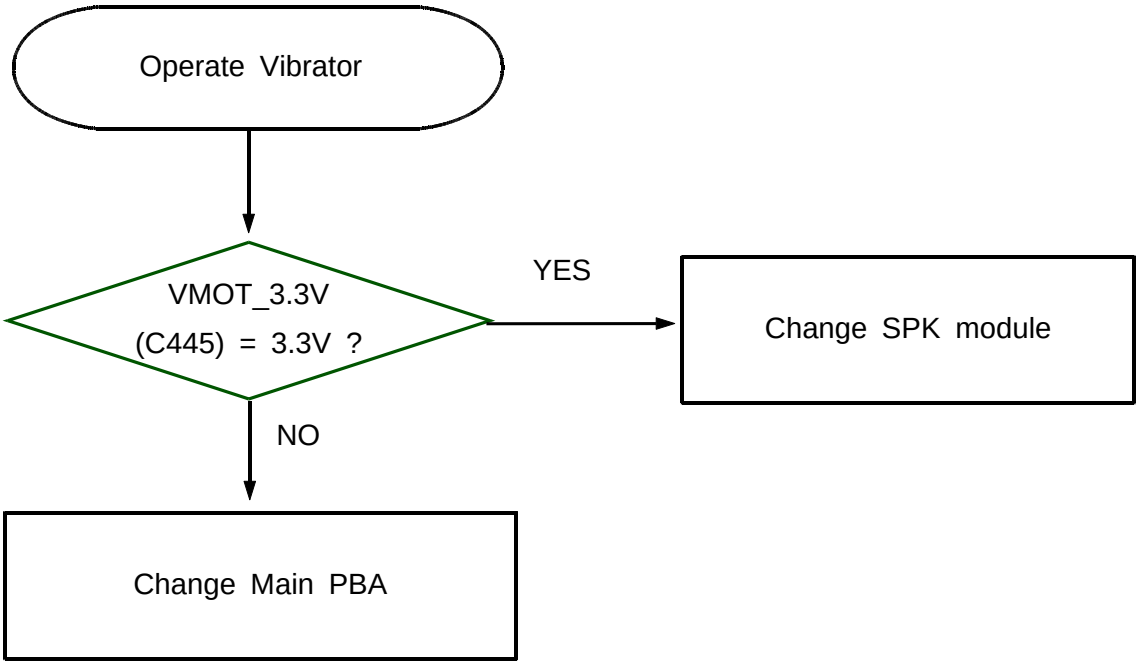
8-3-5. Vibrator Working



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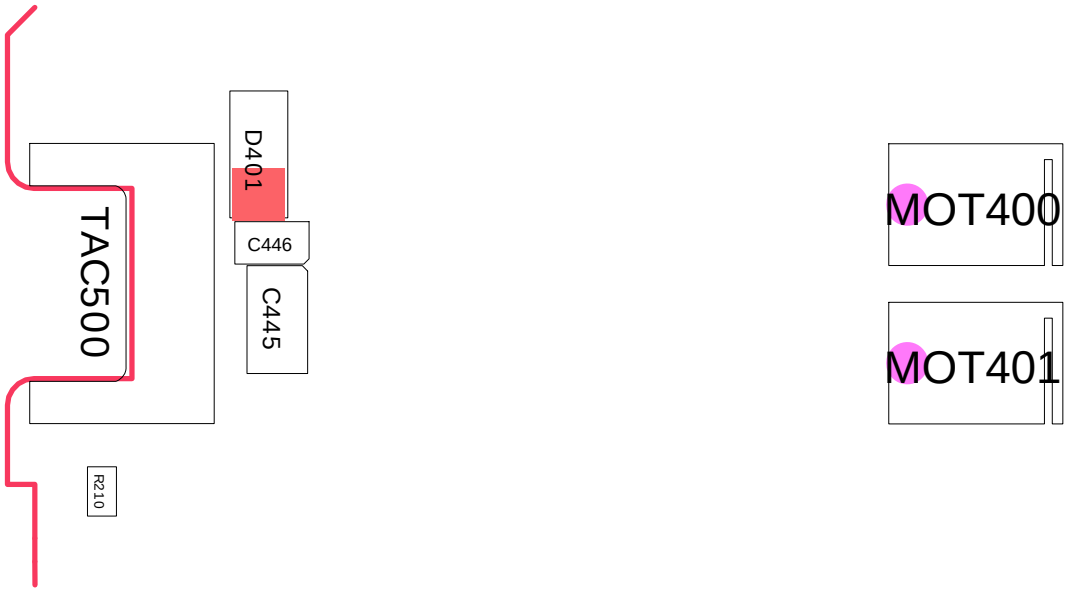

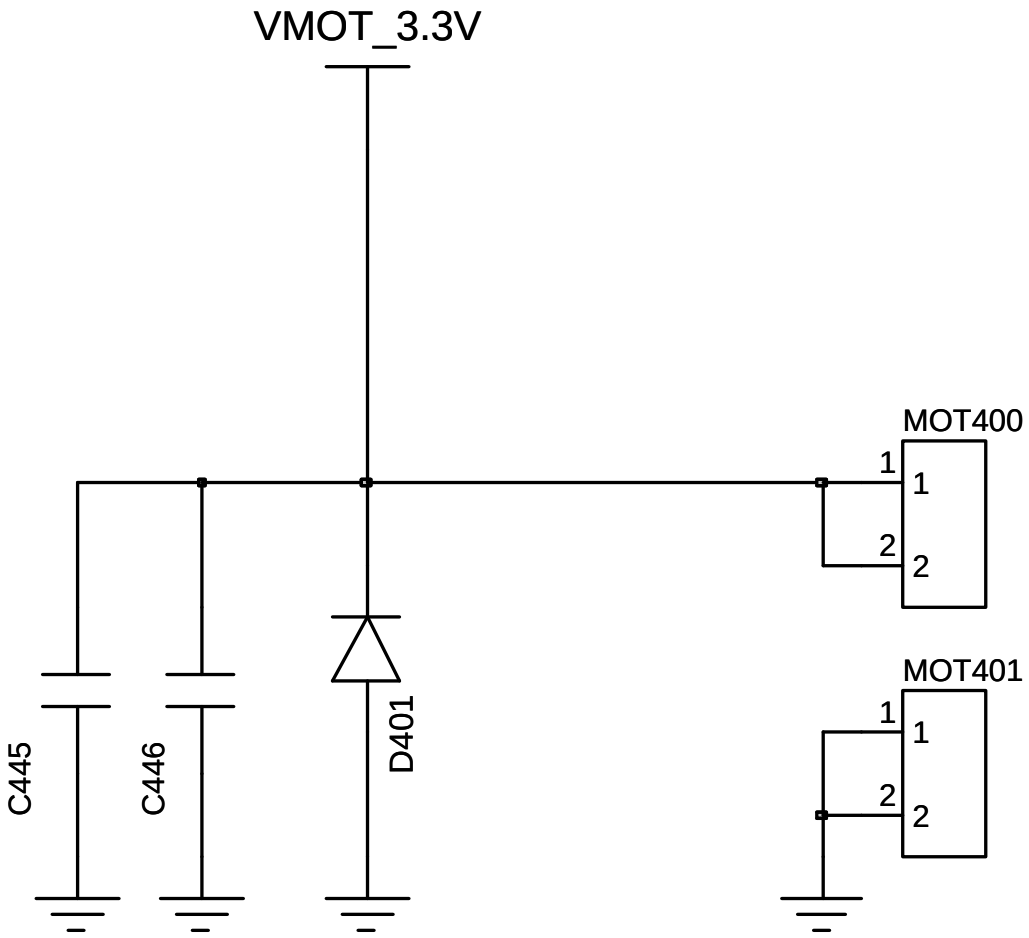

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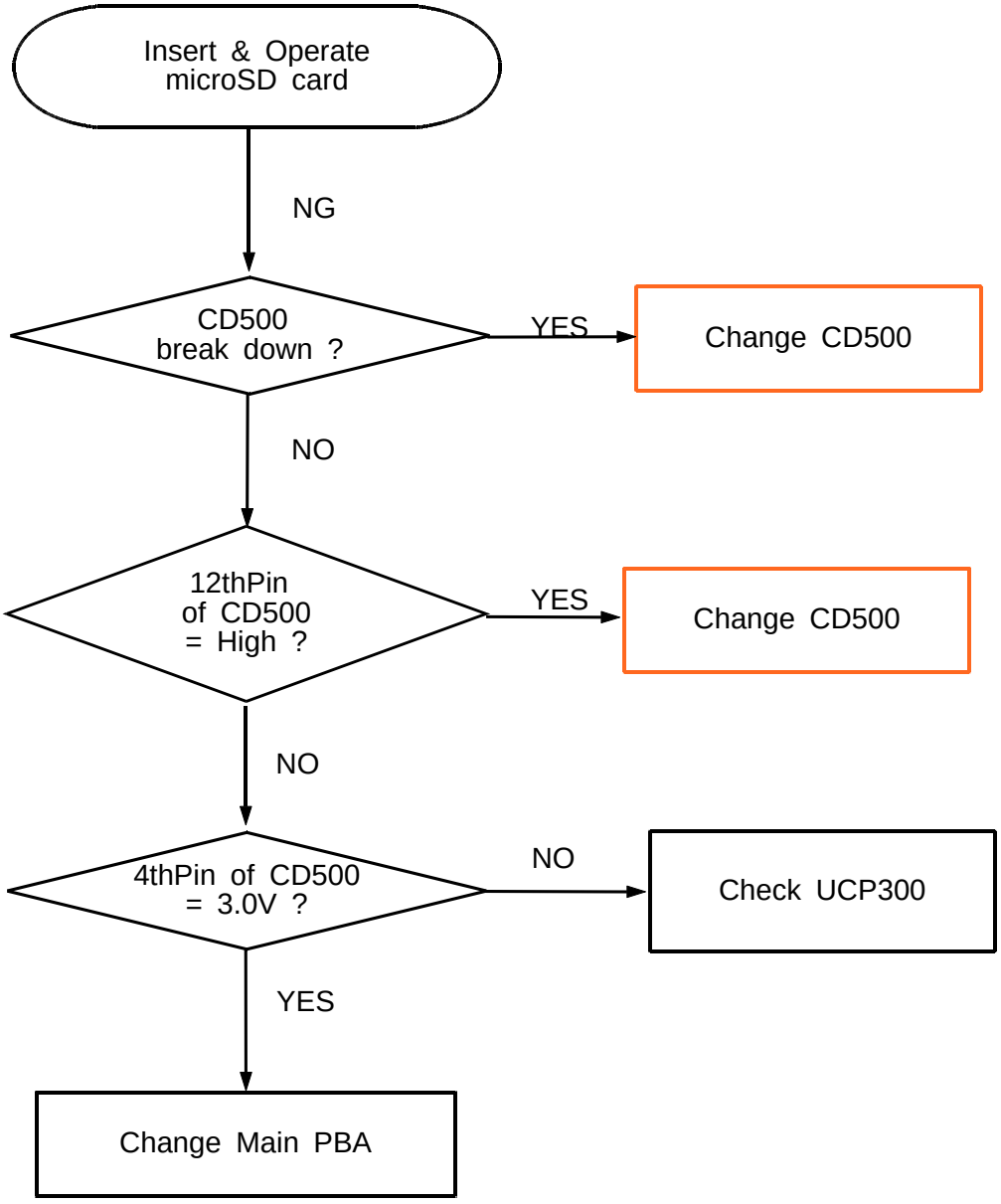
8-3-6. T-Flash Card Working



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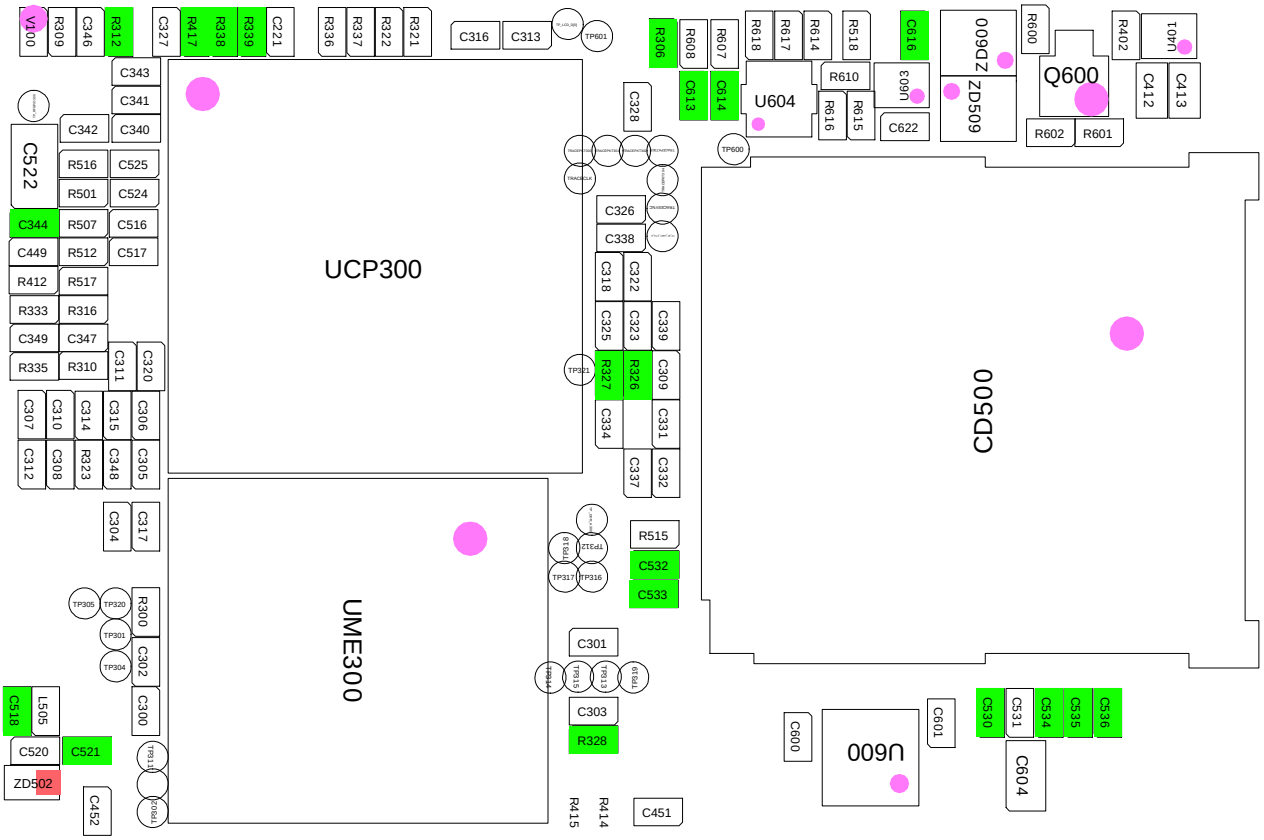

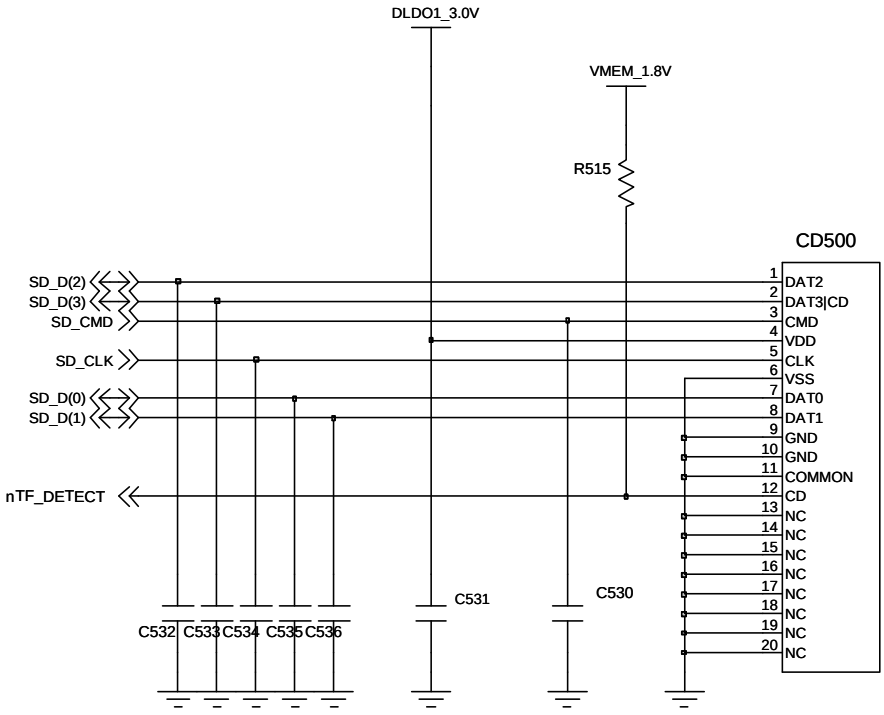

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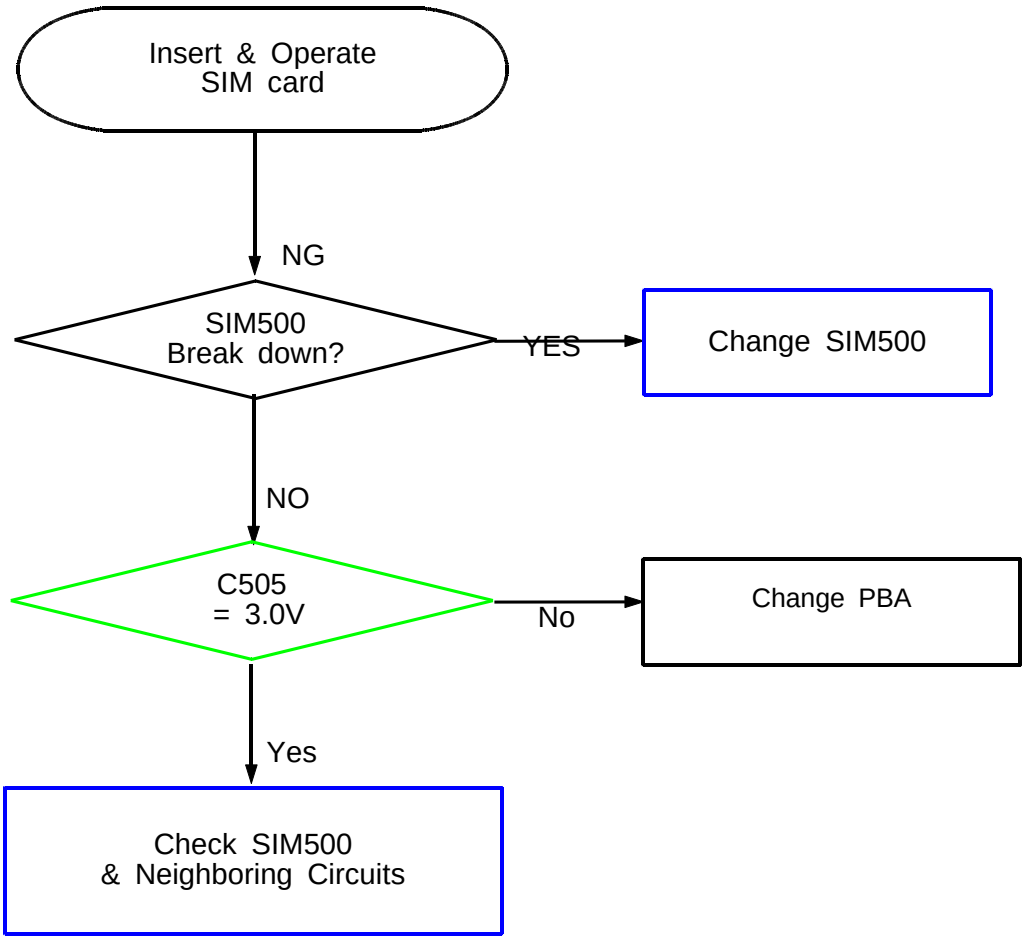
8-3-7. SIM Card Working



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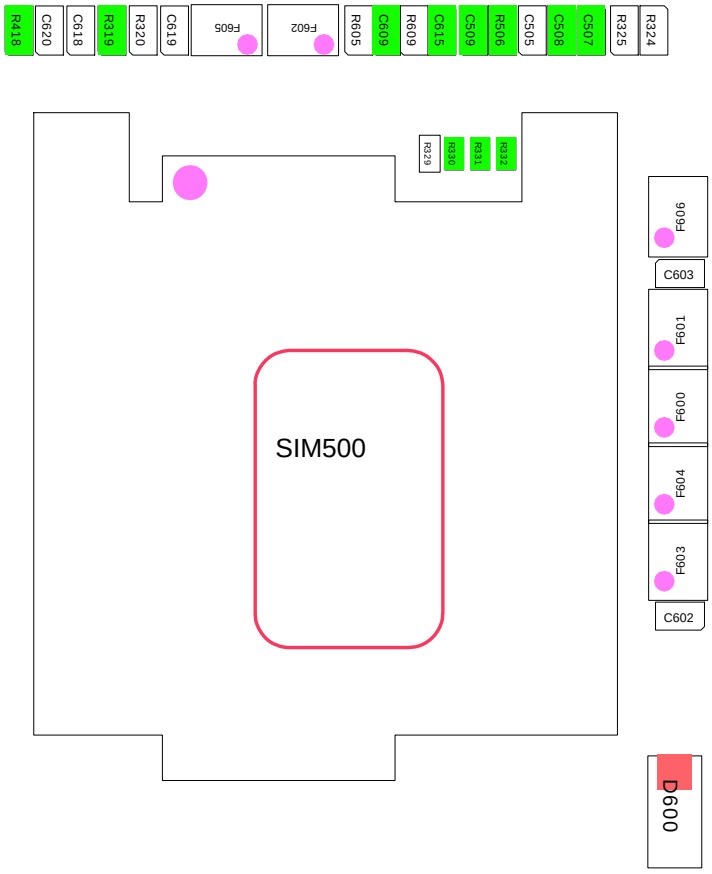

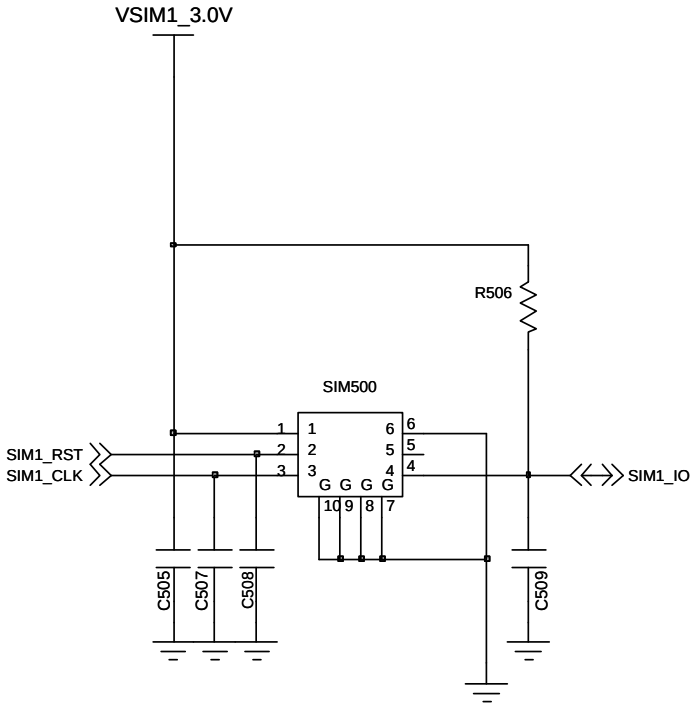

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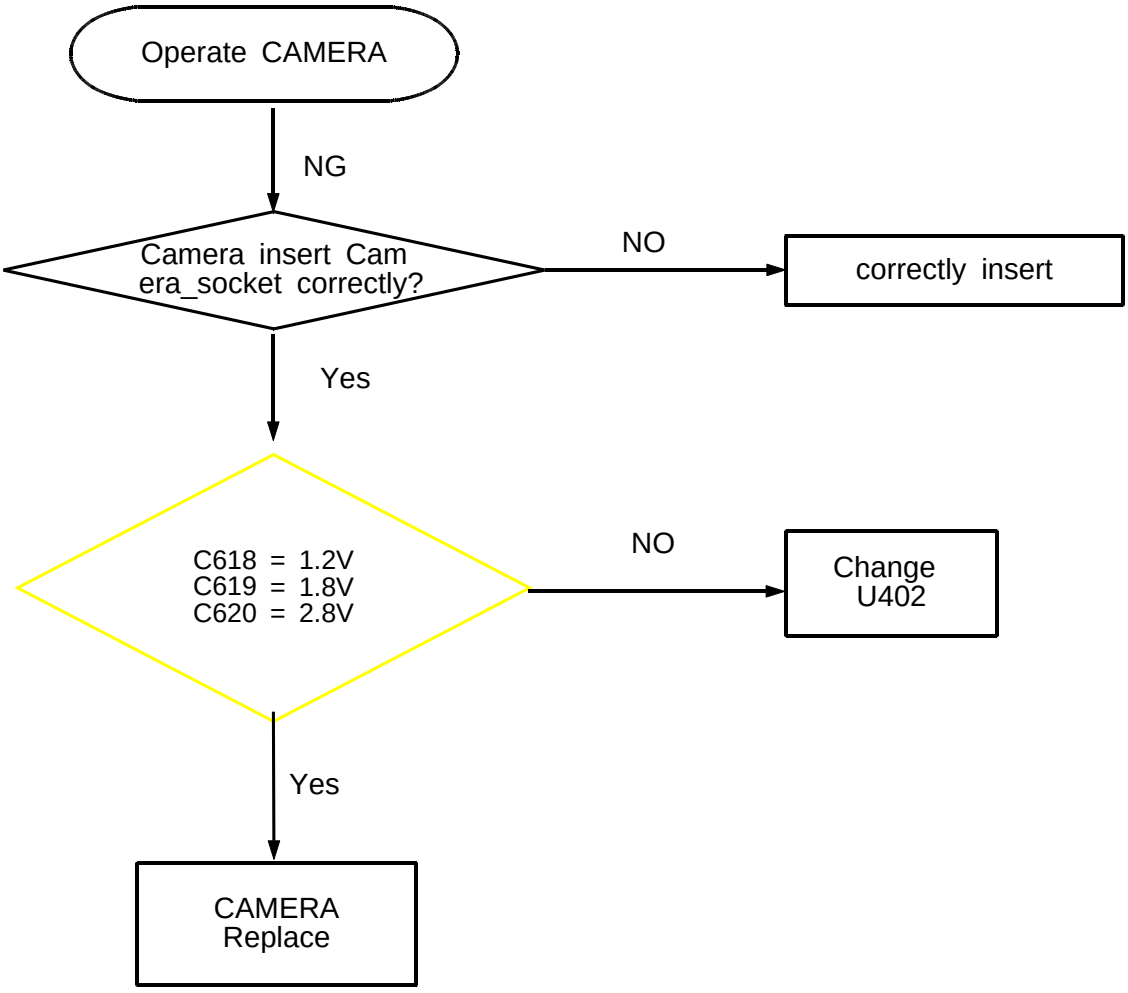
8-3-8 CAMERA Working



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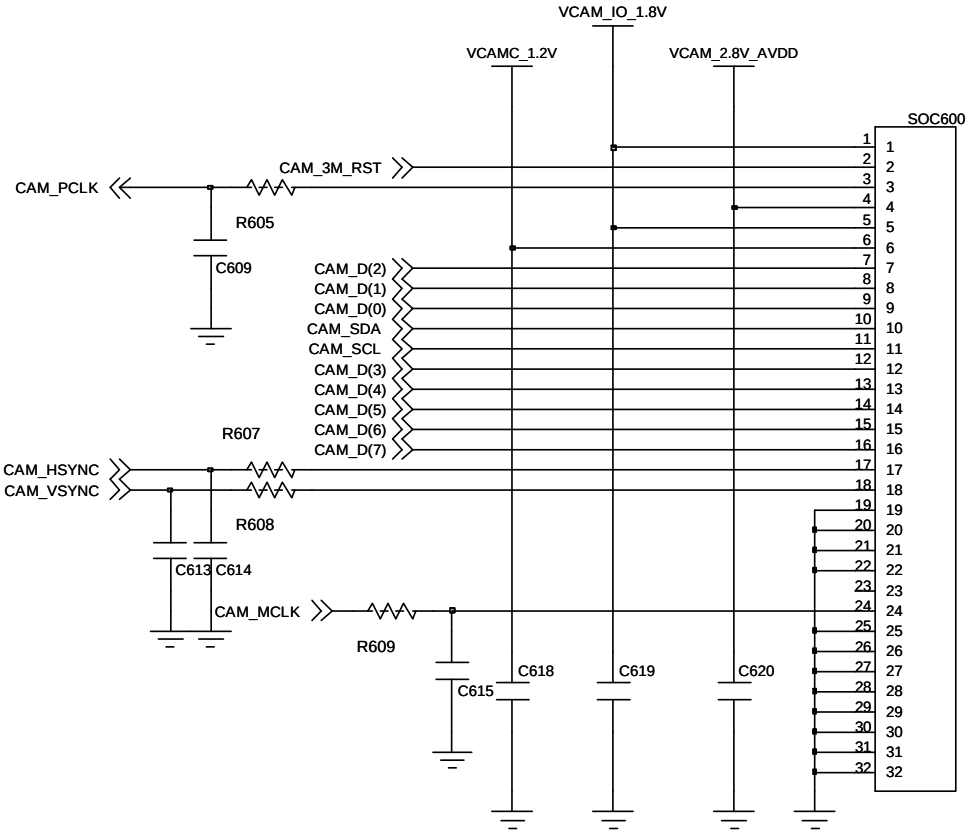

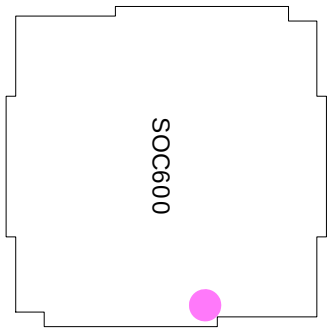

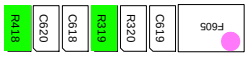

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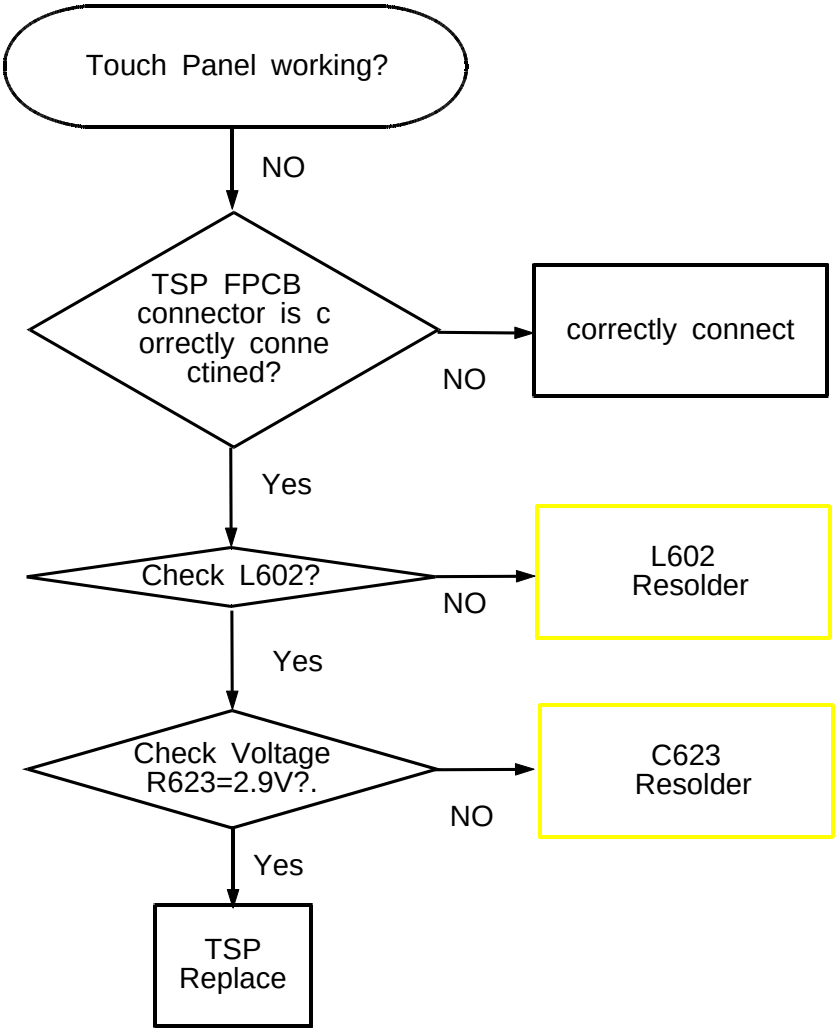
8-3-2. TSP Working



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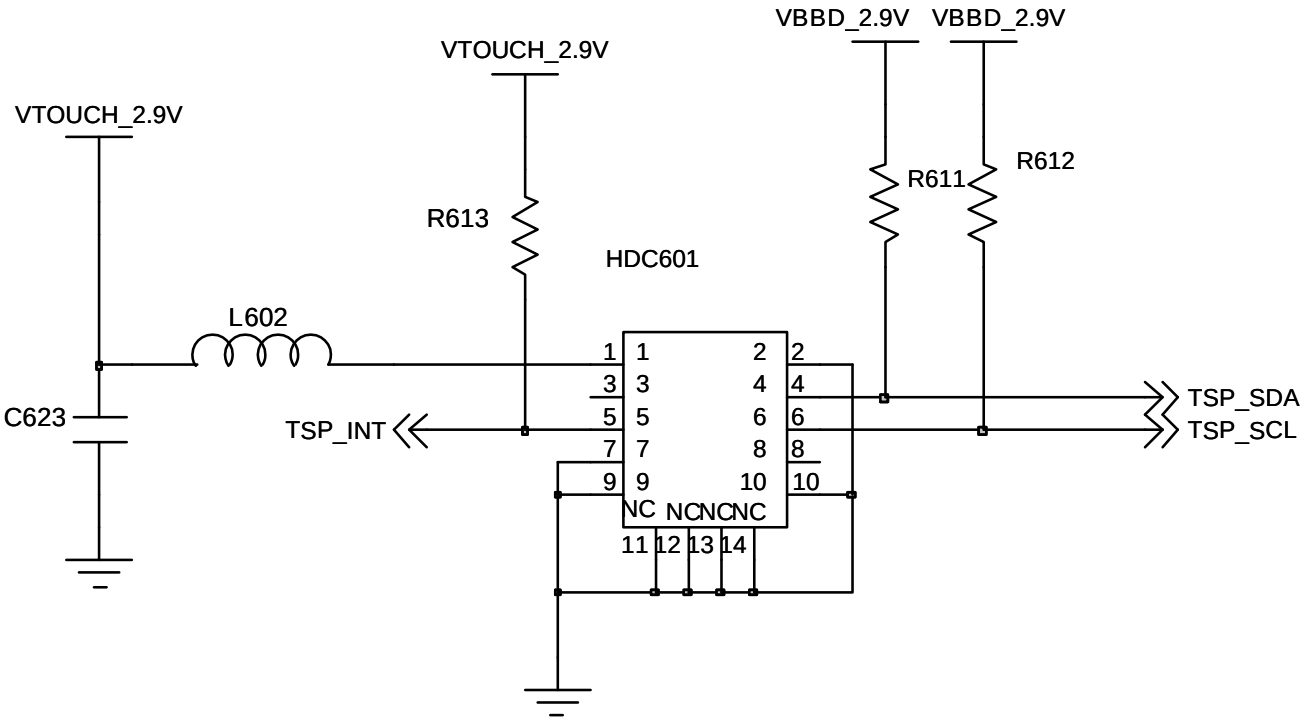

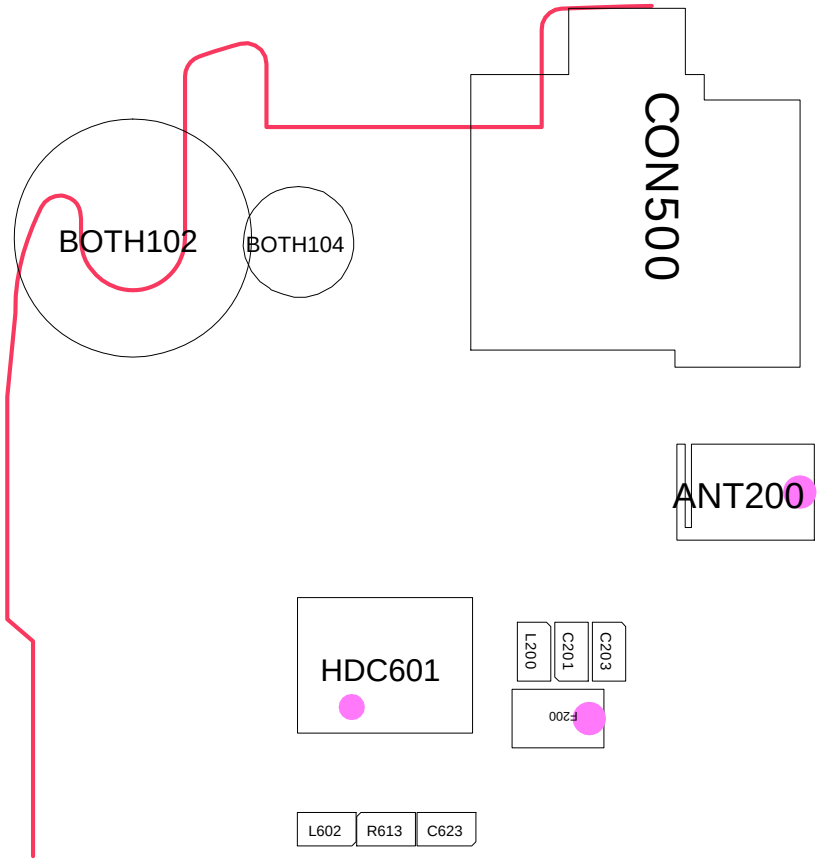

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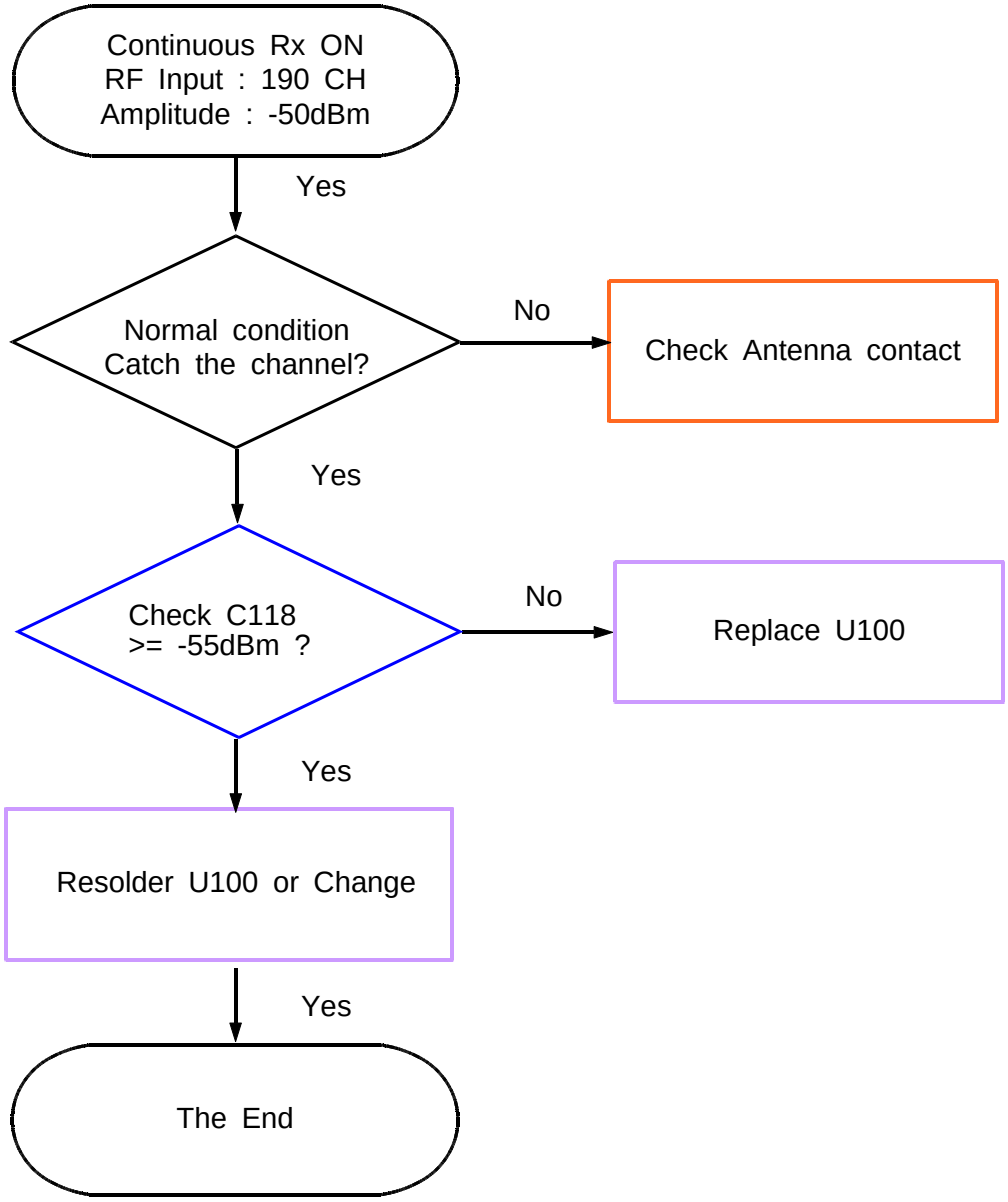
8-4-1. GSM850 RX

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.



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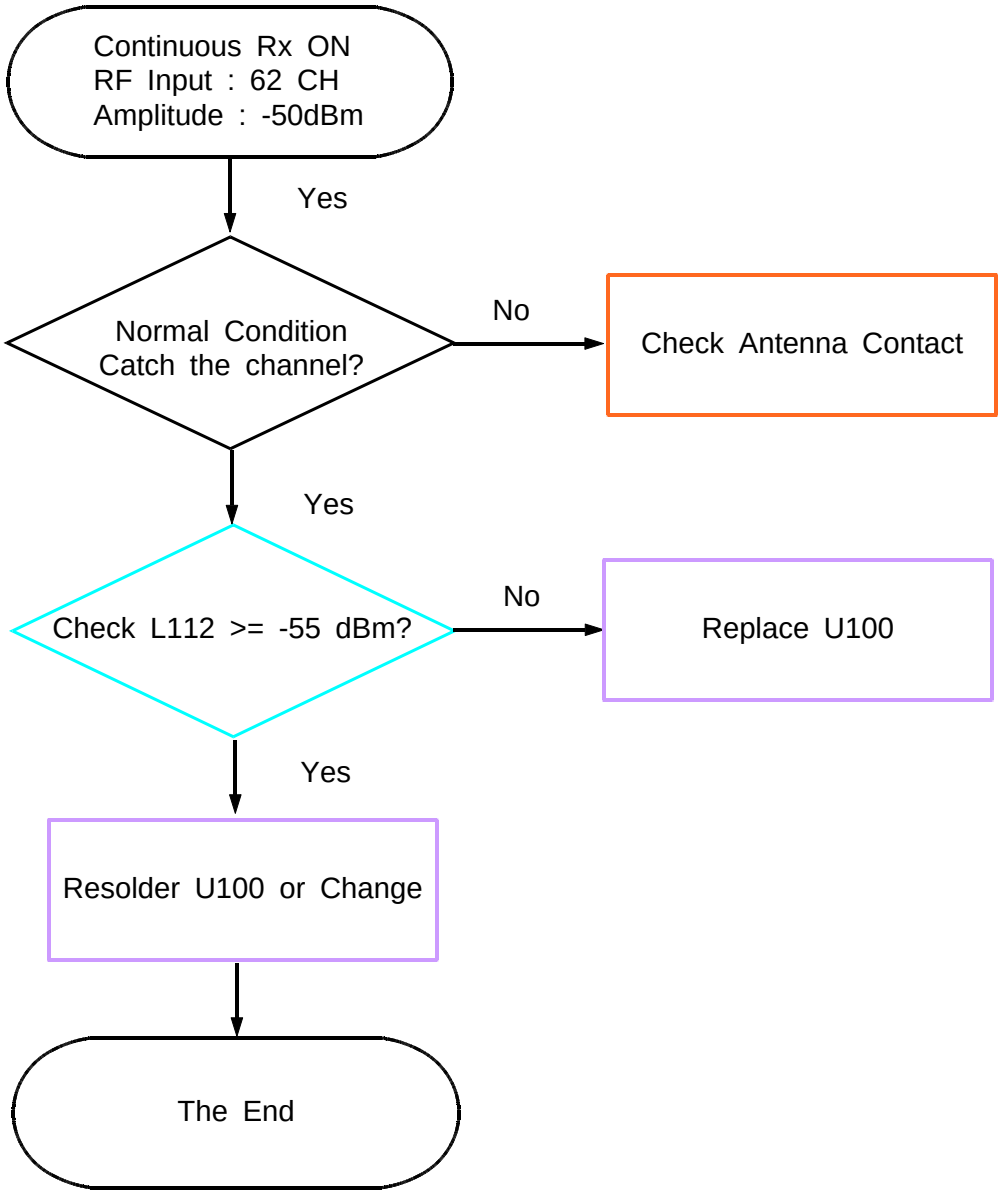
8-4-2. GSM900 RX

**If you check the tx chain,
Check the not only RF Device but also resistor, inductor and capacitor.



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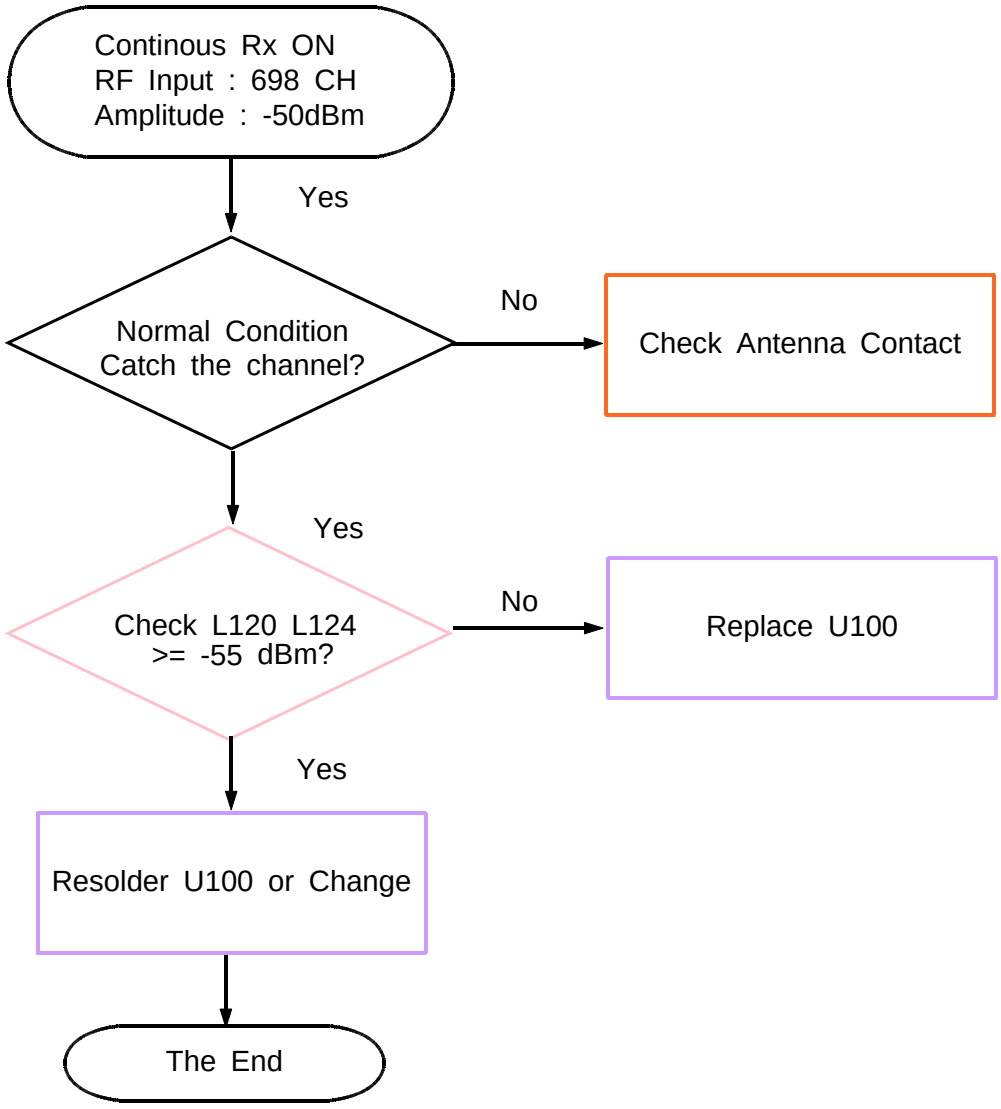
8-4-3. DCS/PCS RX

**If you check the tx chain,
Check the not only RF Device but also resistor, inductor and capacitor.



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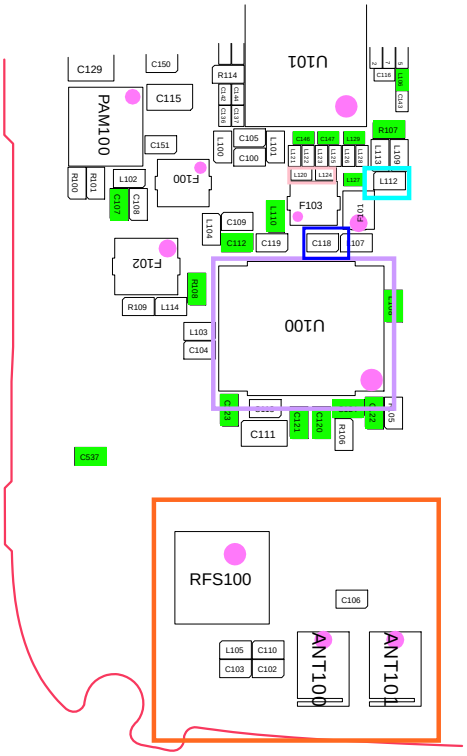

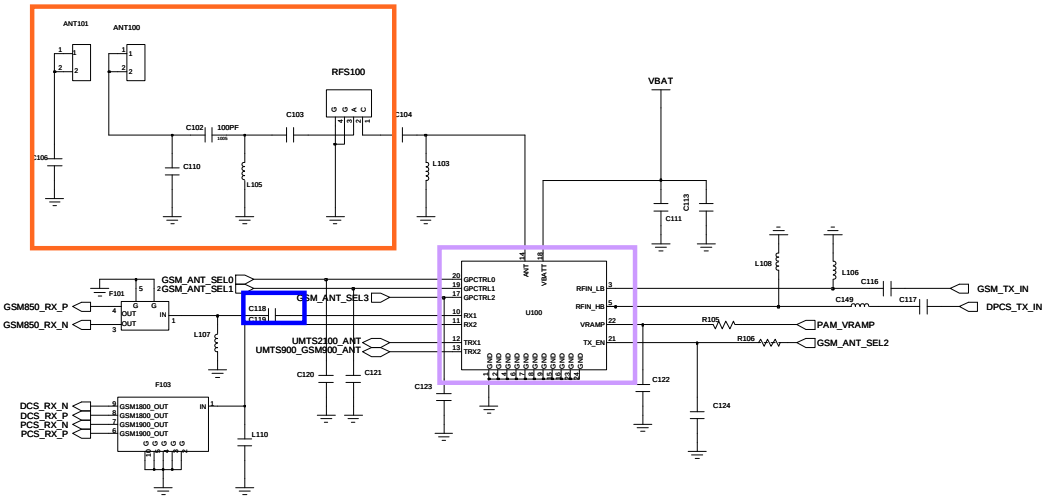

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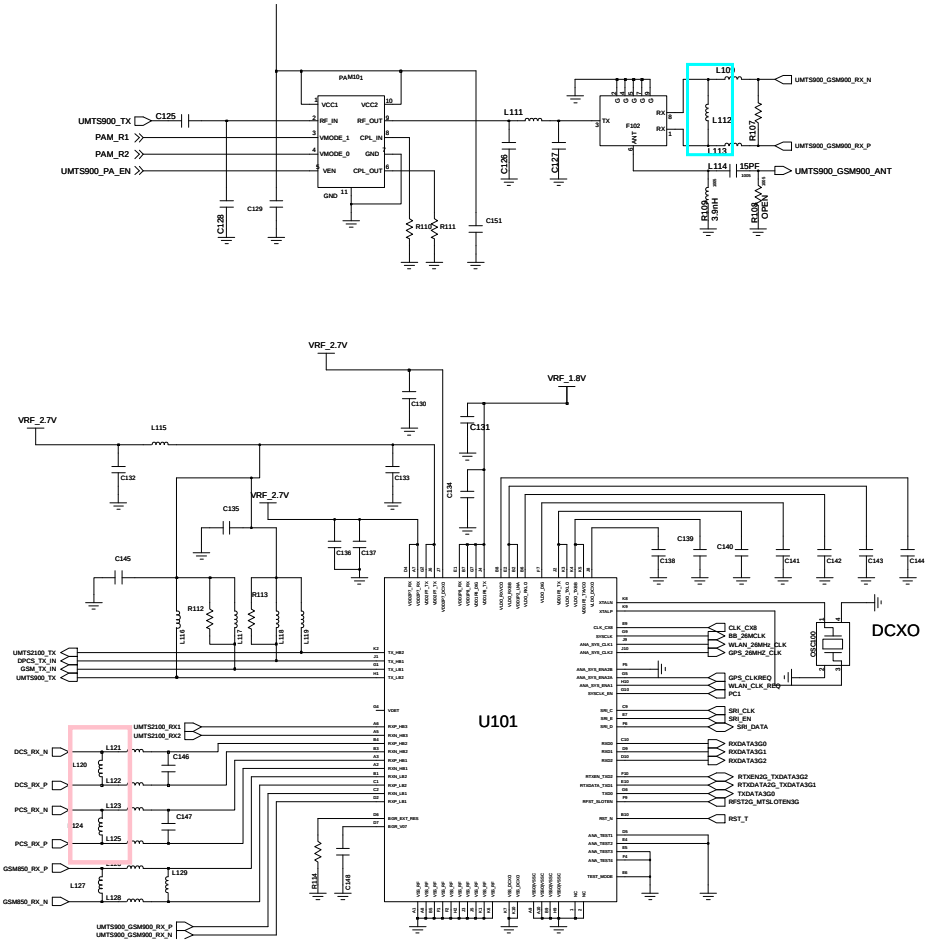

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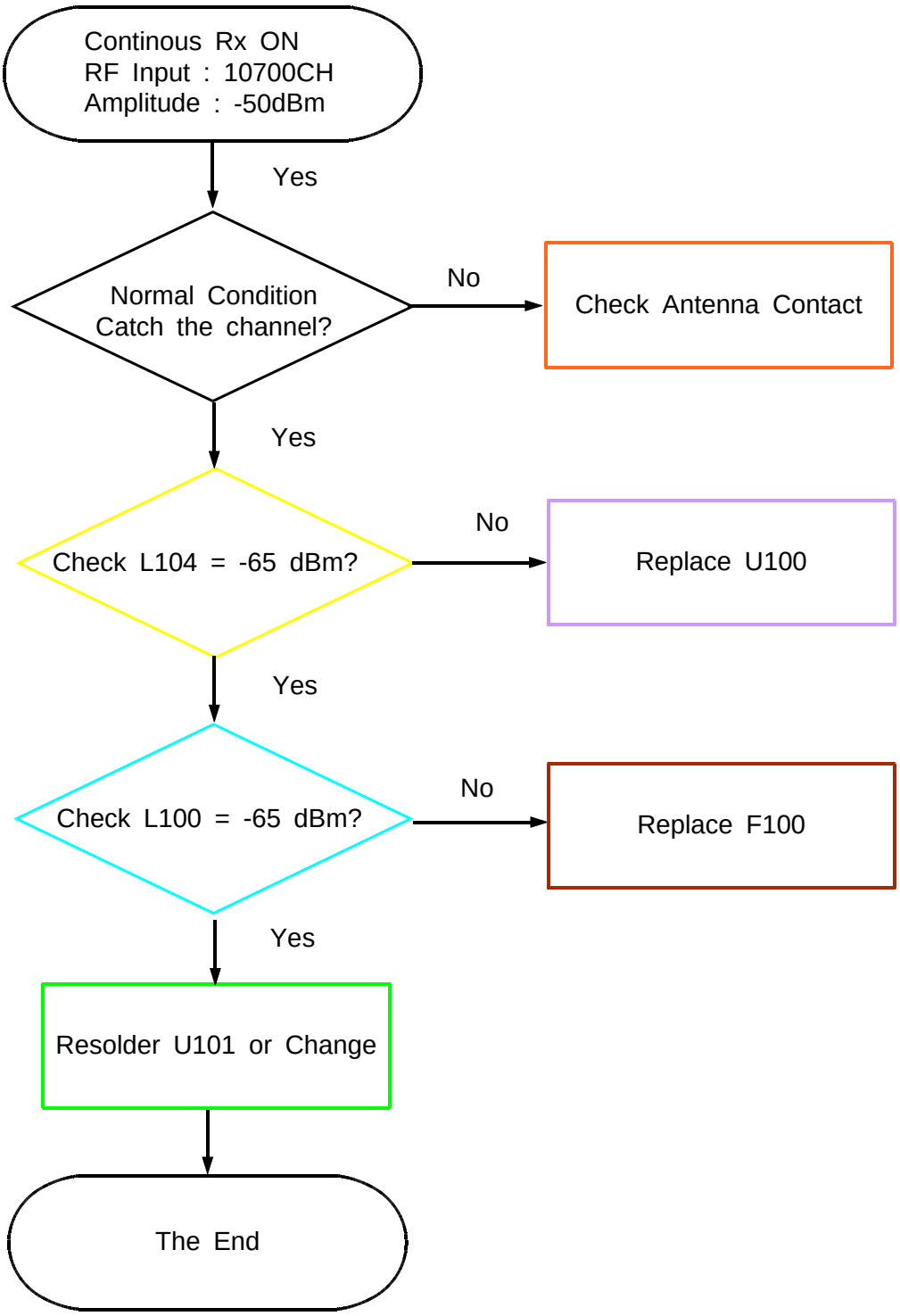
8-4-4. WCDMA Band1 RX

**If you check the tx chain,
Check the not only RF Device but also resistor, inductor and capacitor.



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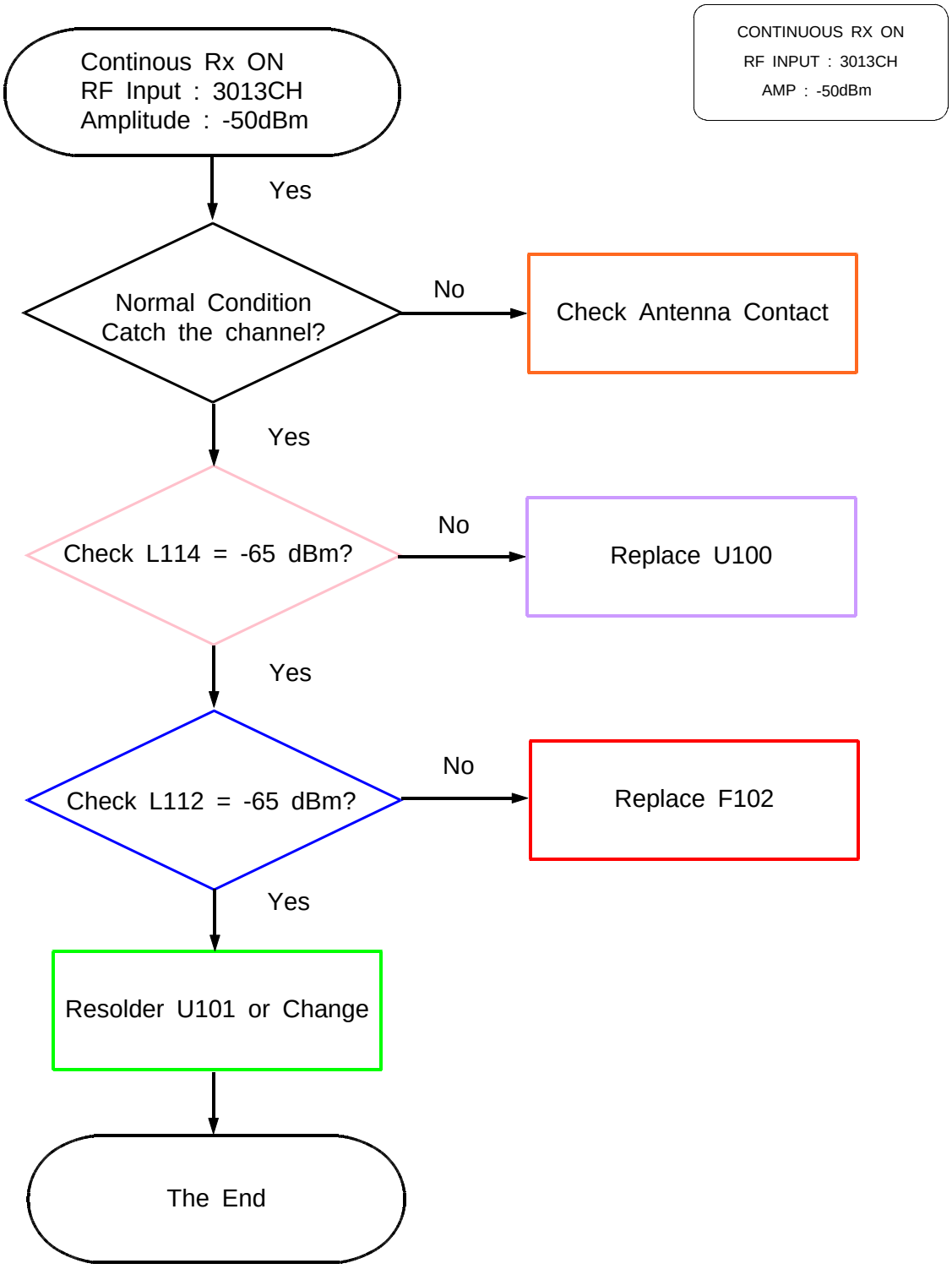
8-4-5. WCDMA Band8 RX

**If you check the tx chain,
Check the not only RF Device but also resistor, inductor and capacitor.



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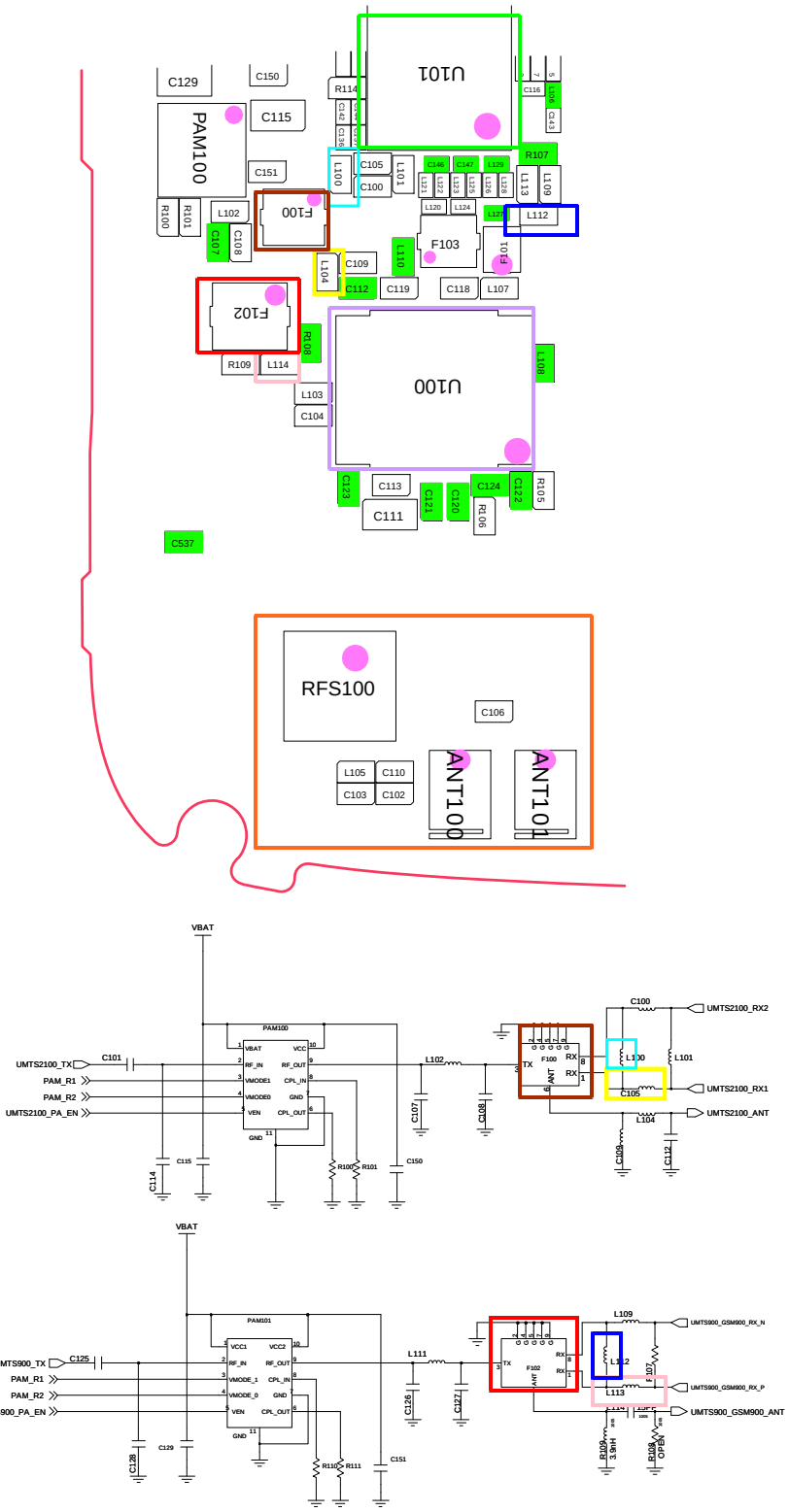

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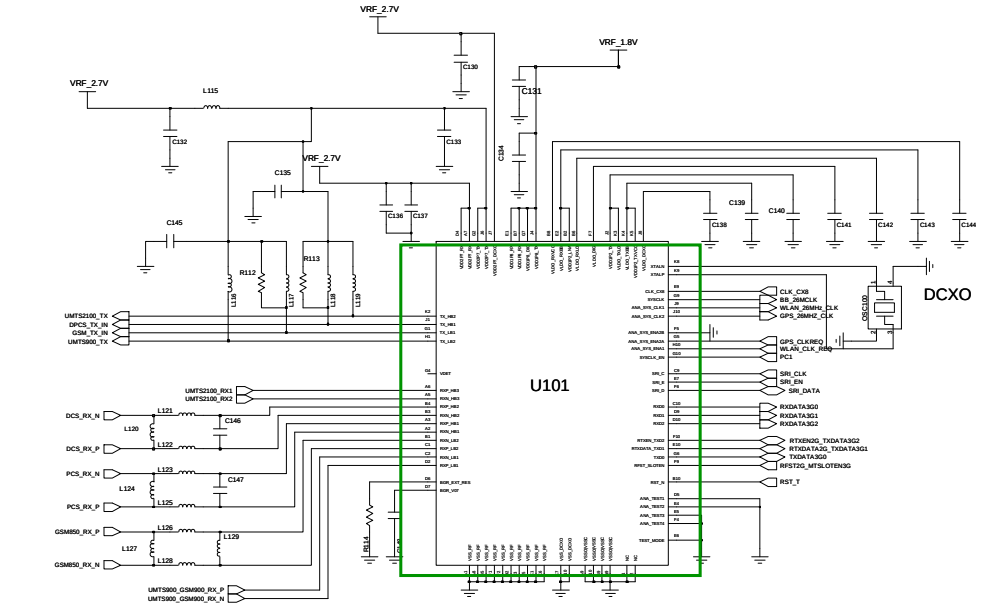

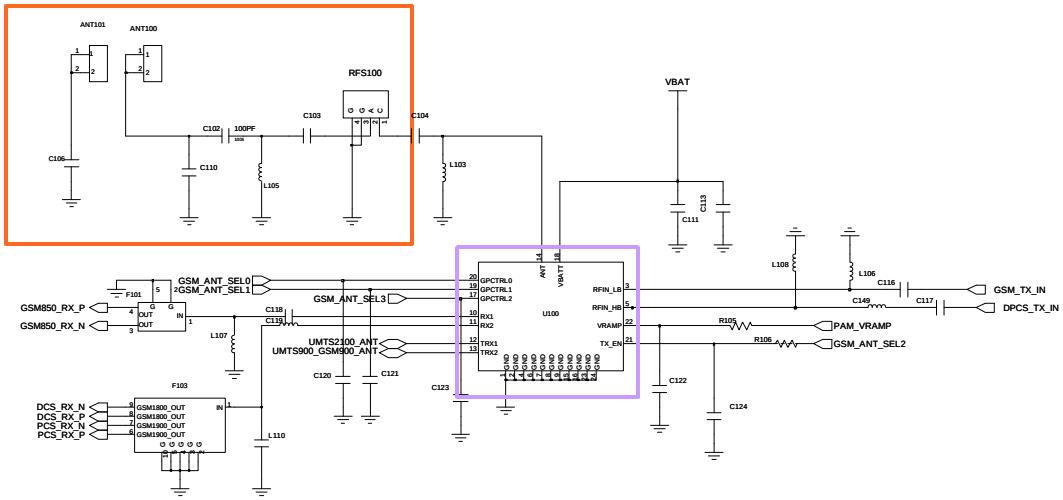

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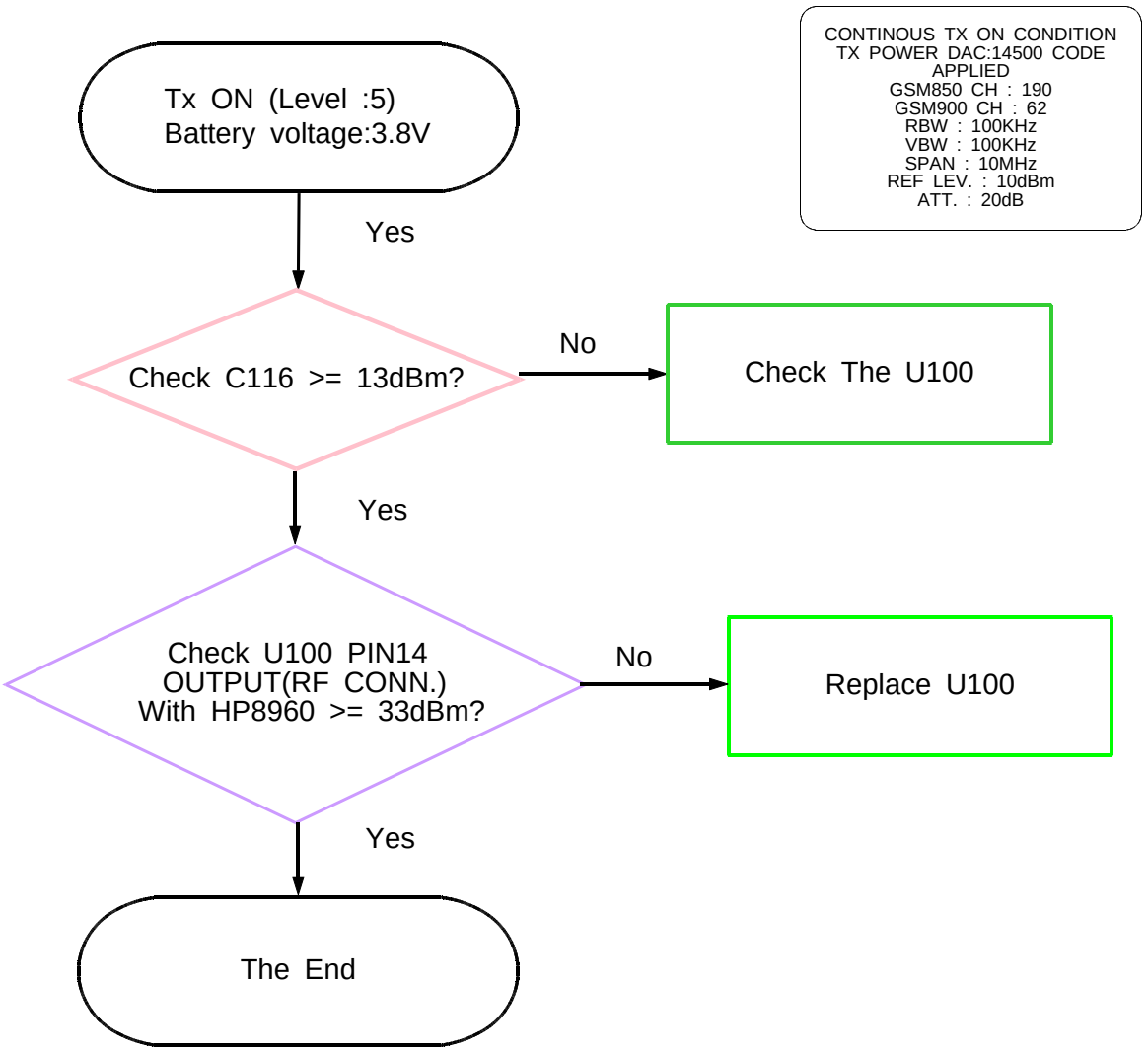
8-4-6. GSM850/900 TX

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.



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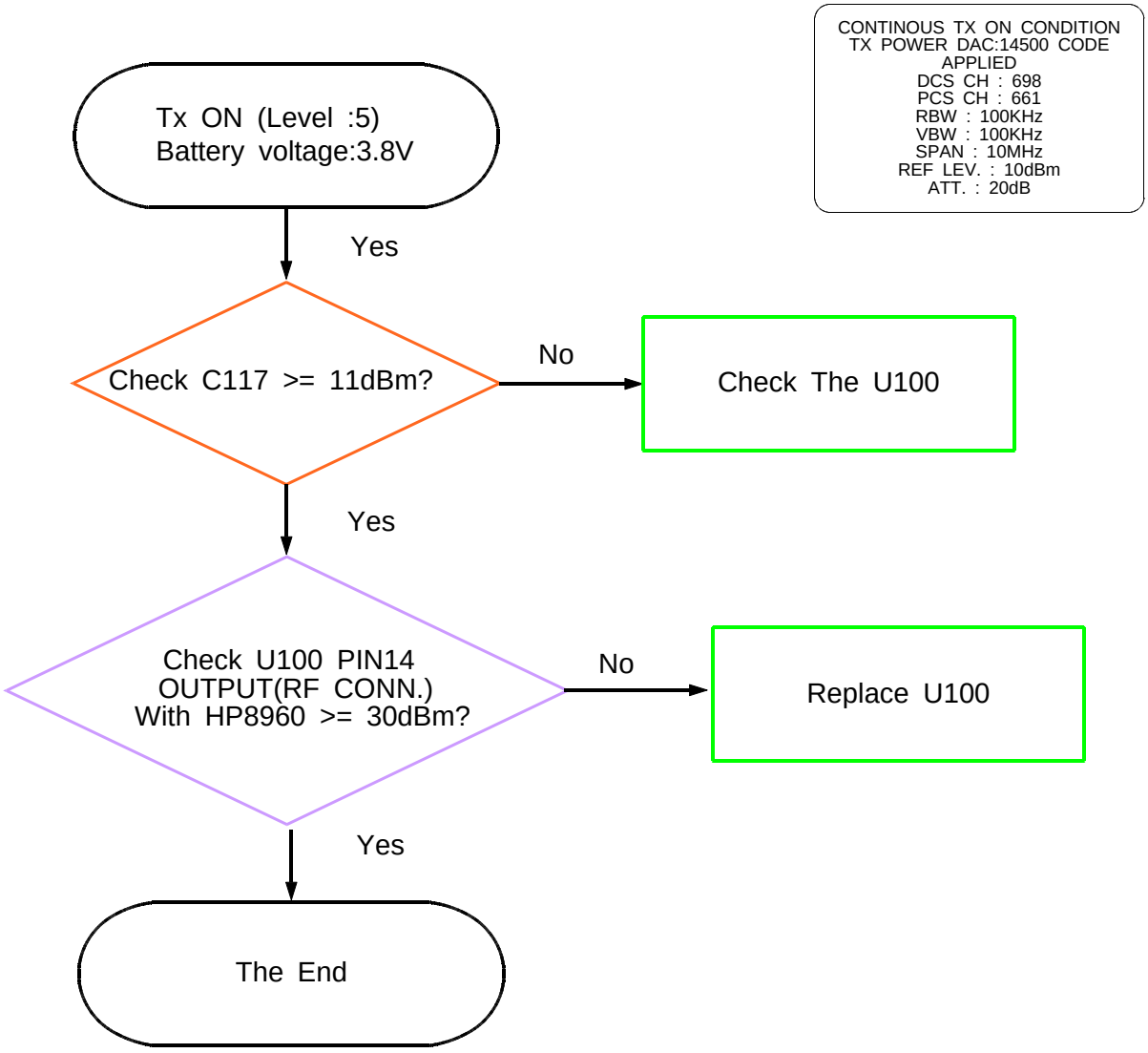
8-4-7. DCS/PCS TX

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.



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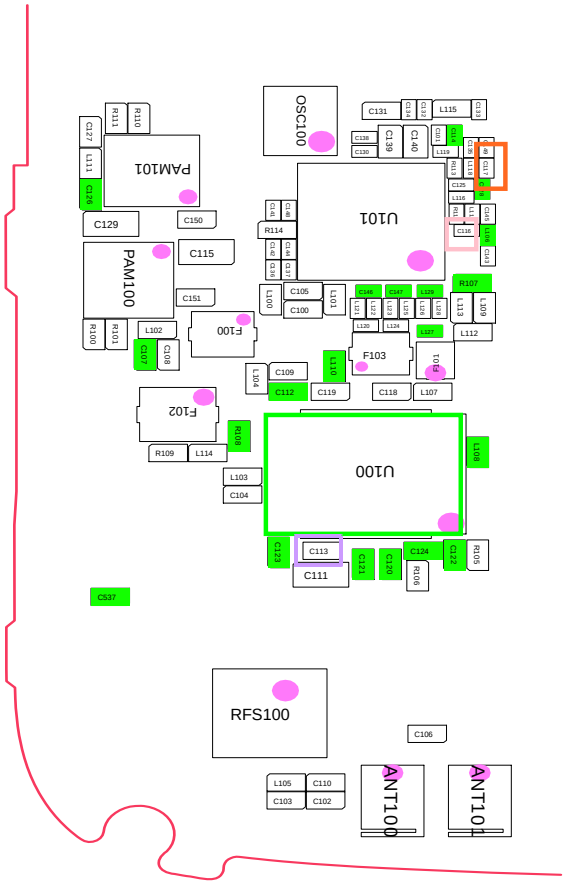

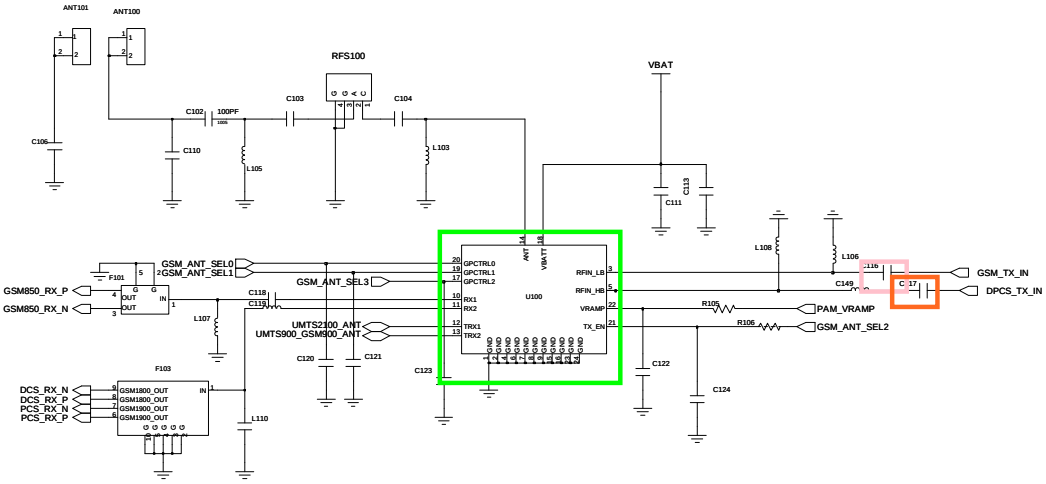

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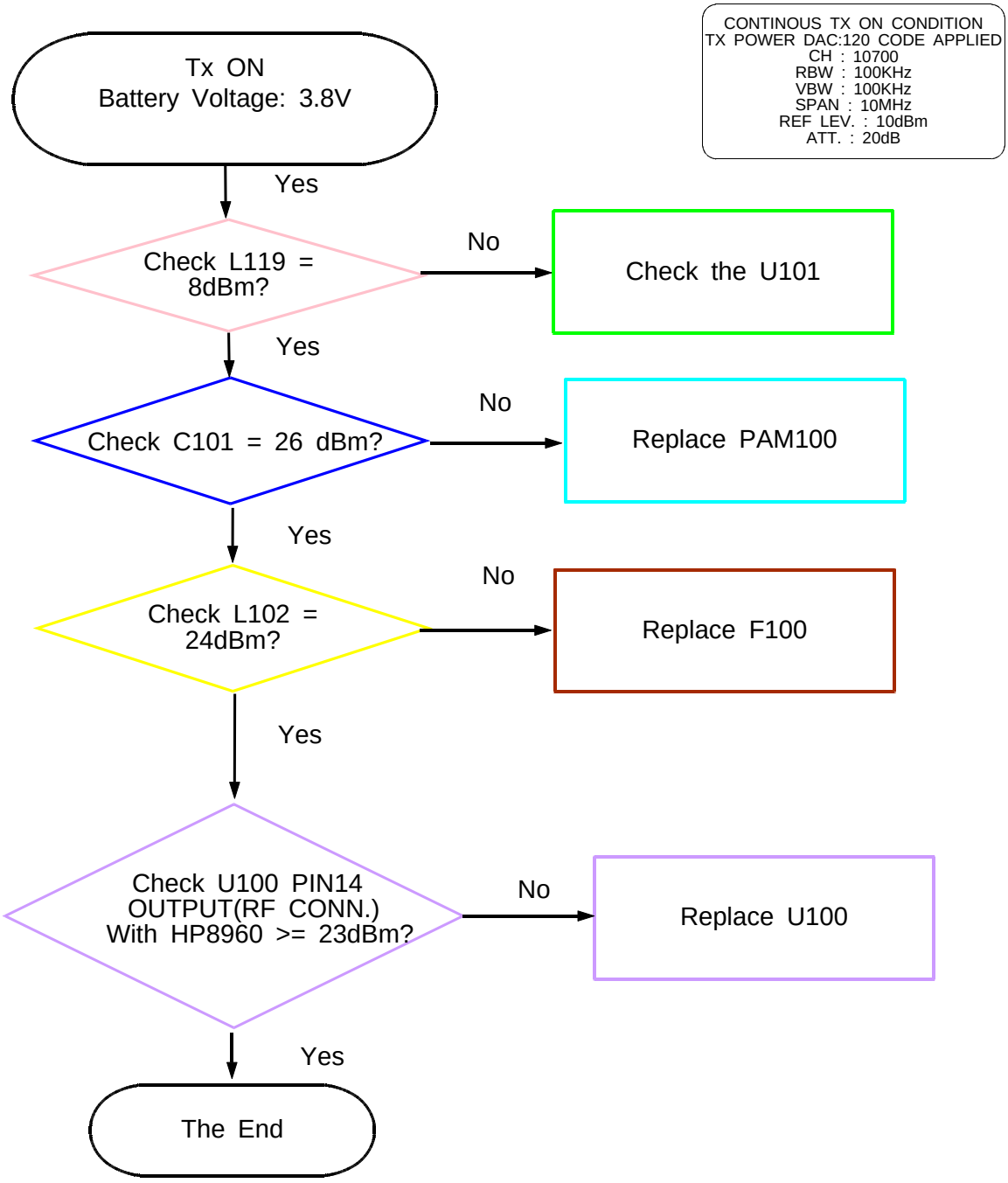
8-4-8. WCDMA Band1 TX

**If you check the tx chain,

Check the not only RF Device but also resistor, inductor and capacitor.



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8-4-9. WCDMA Band8 TX

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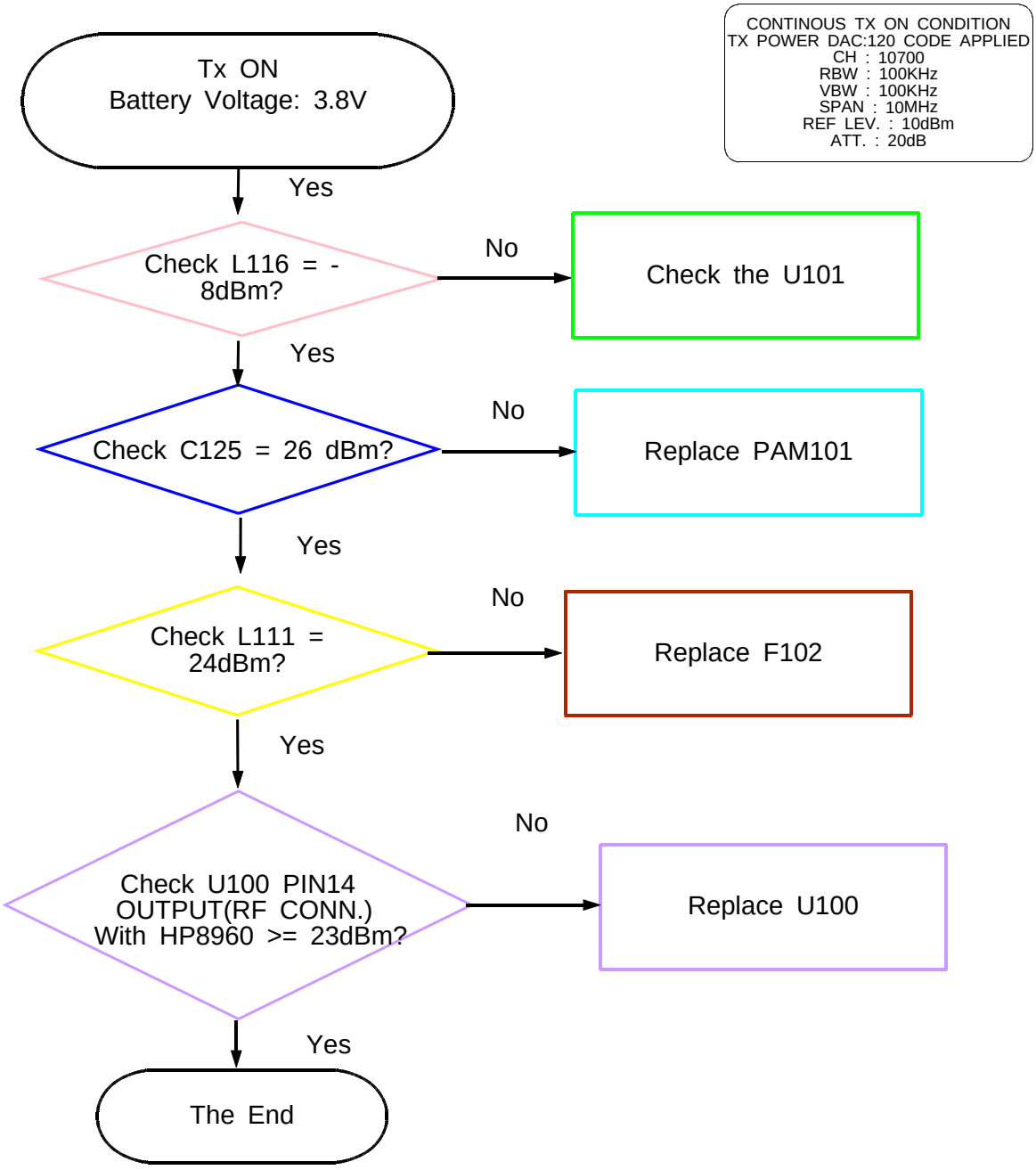
Check the not only RF Device but also resistor, inductor and capacitor.



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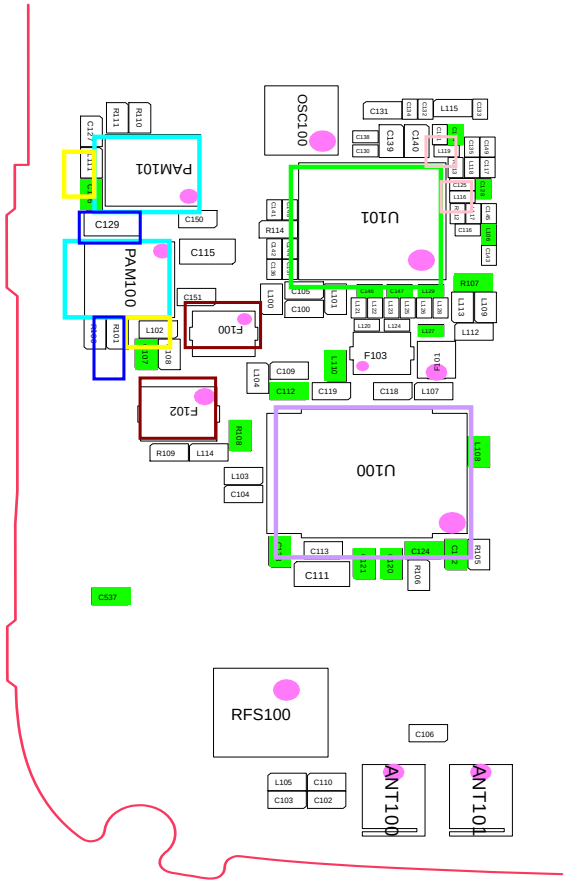

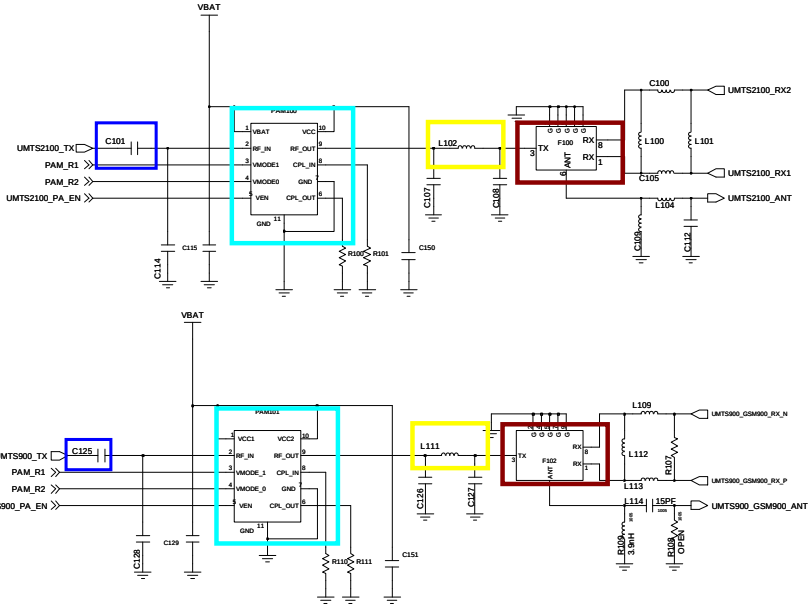

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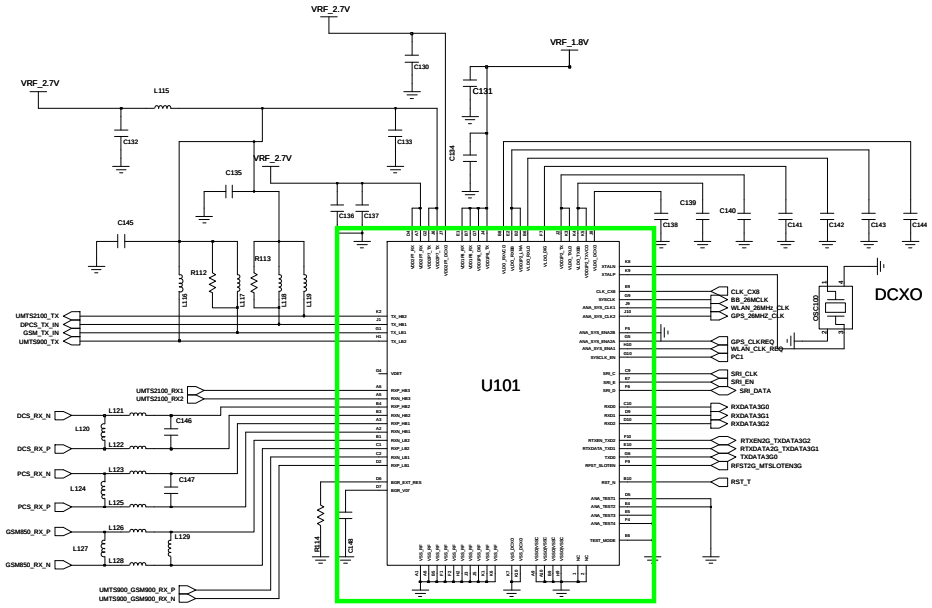

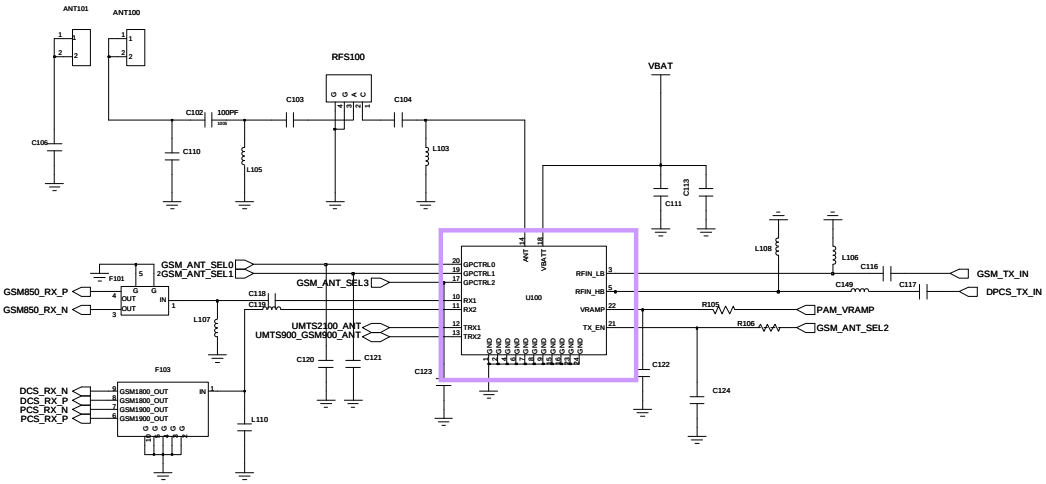

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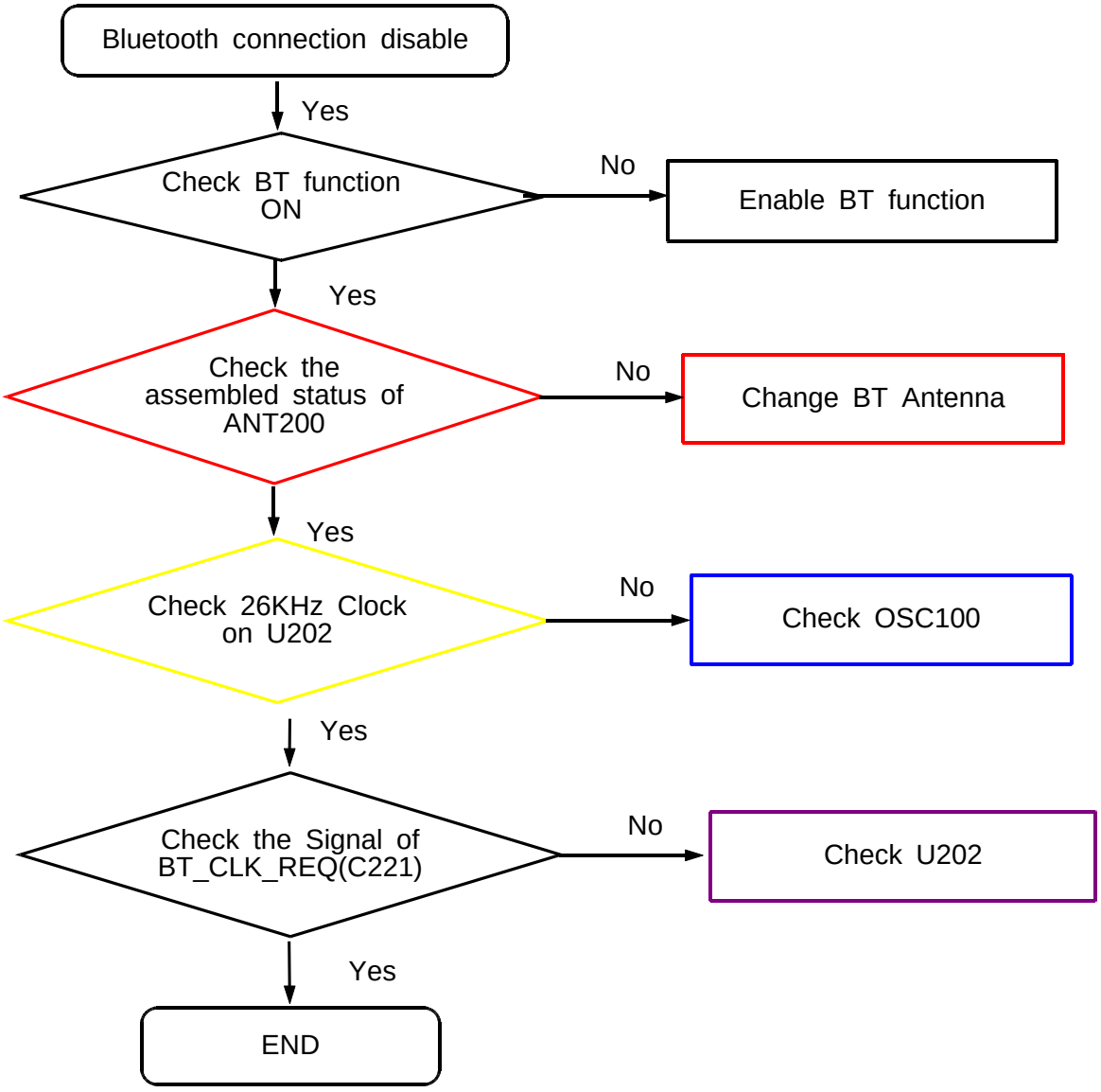
8-4-10. BLUETOOTH



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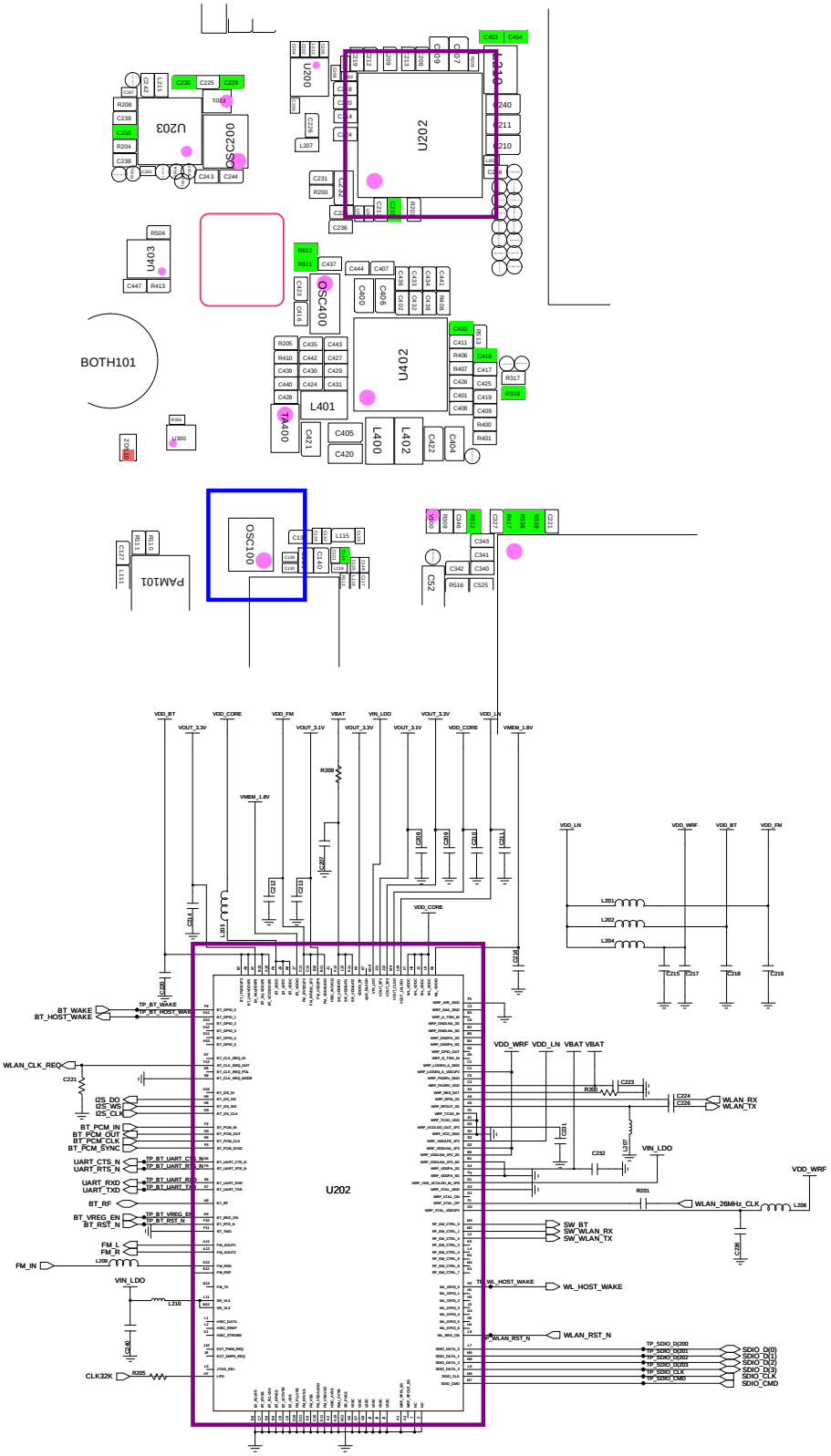

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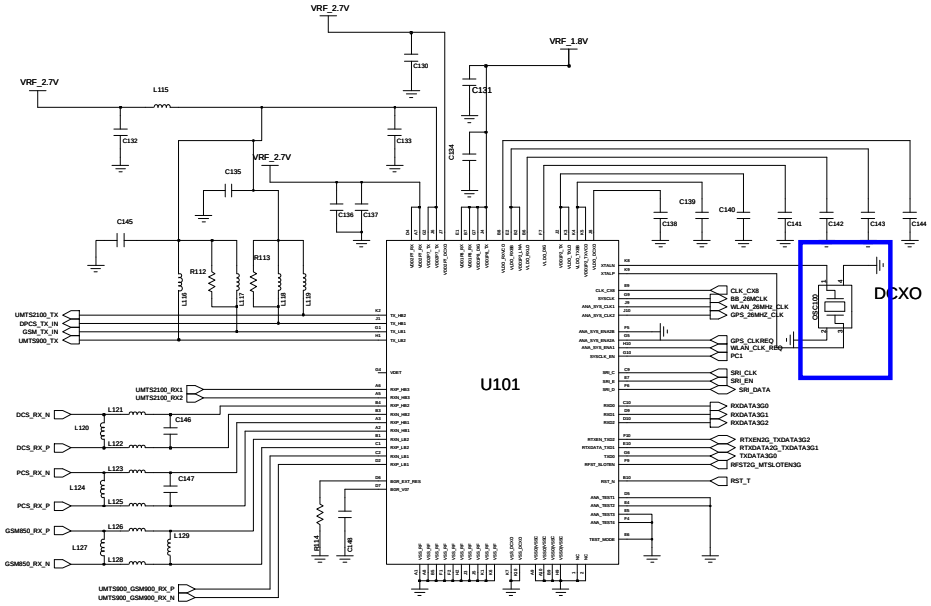

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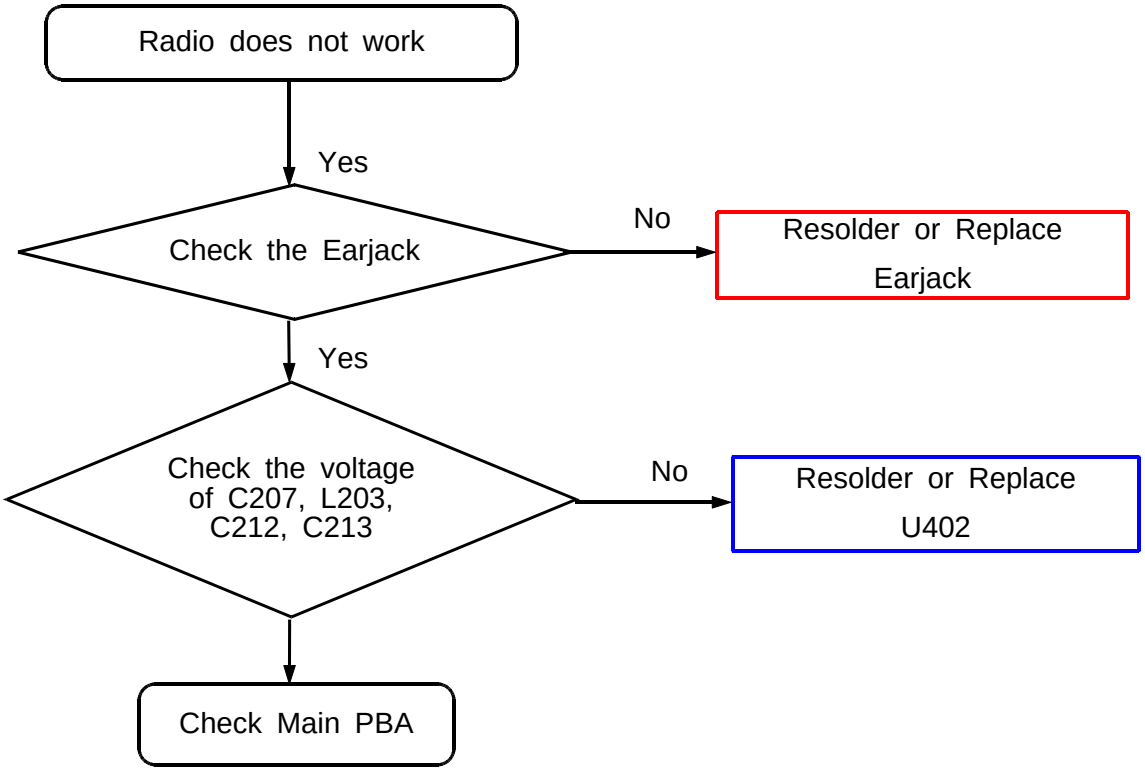
8-4-11. FM RADIO



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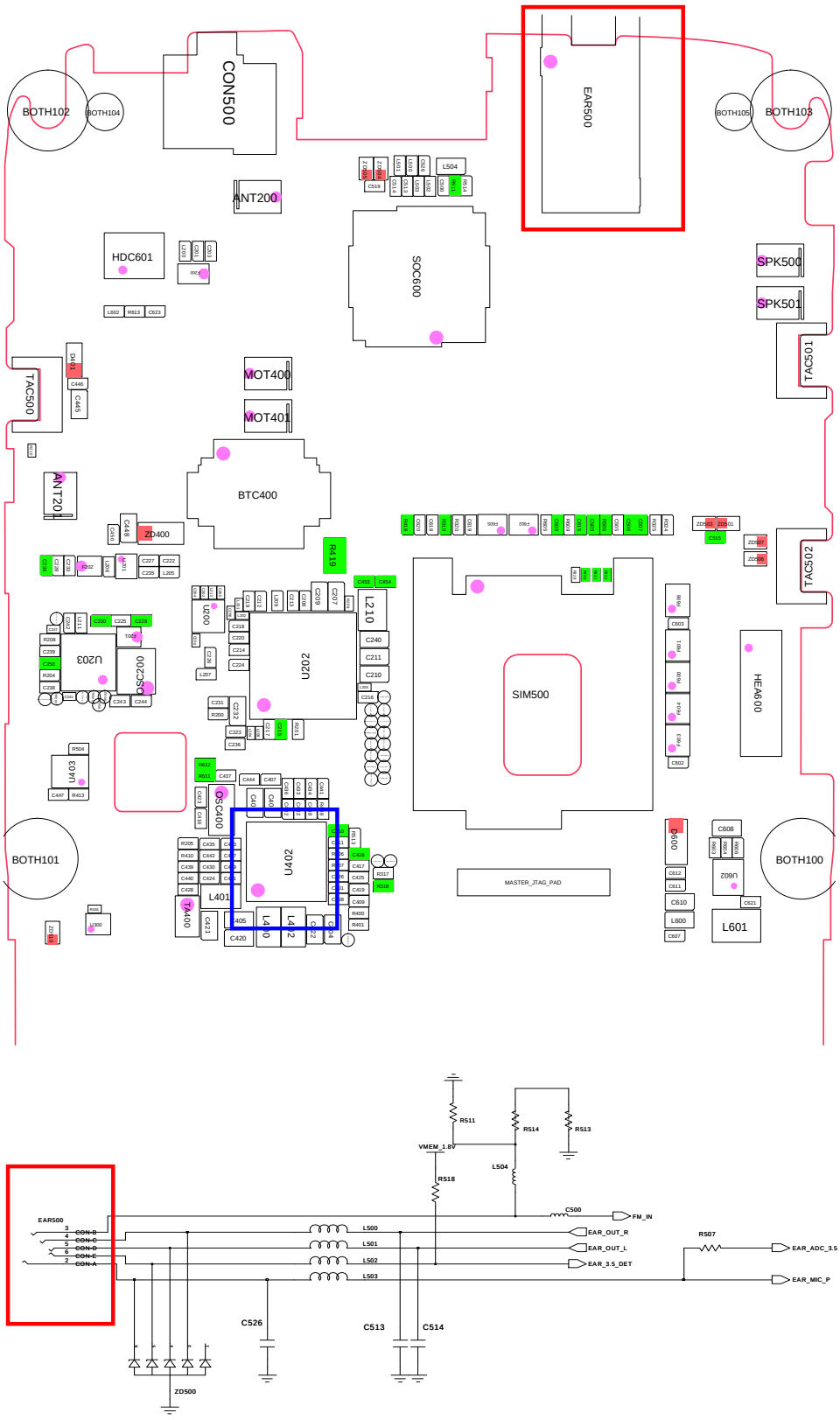

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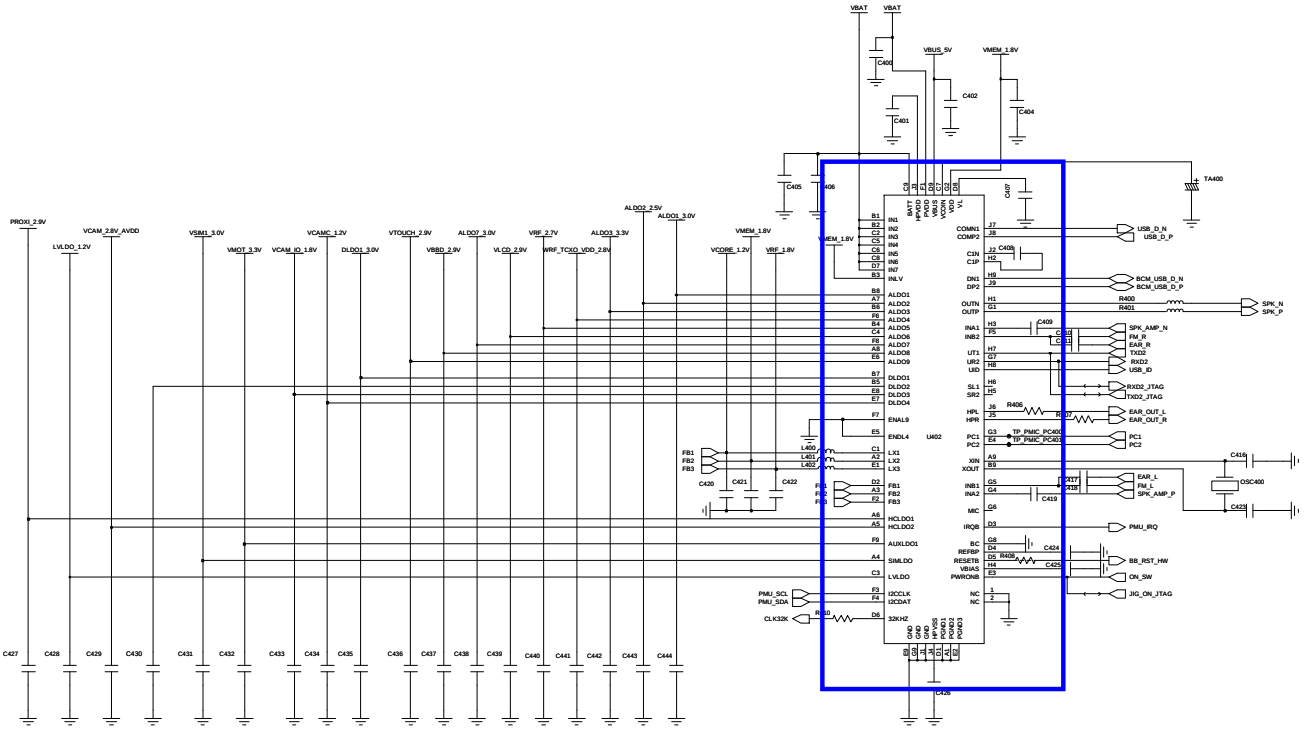

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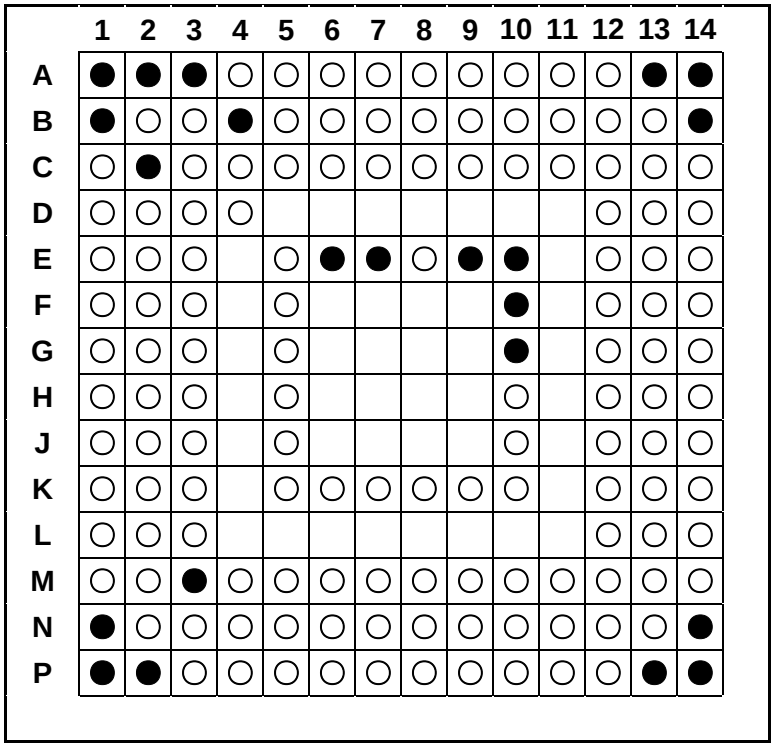
8-5. Service Schematics

- NC Point(Top View)

● : NC

UME300



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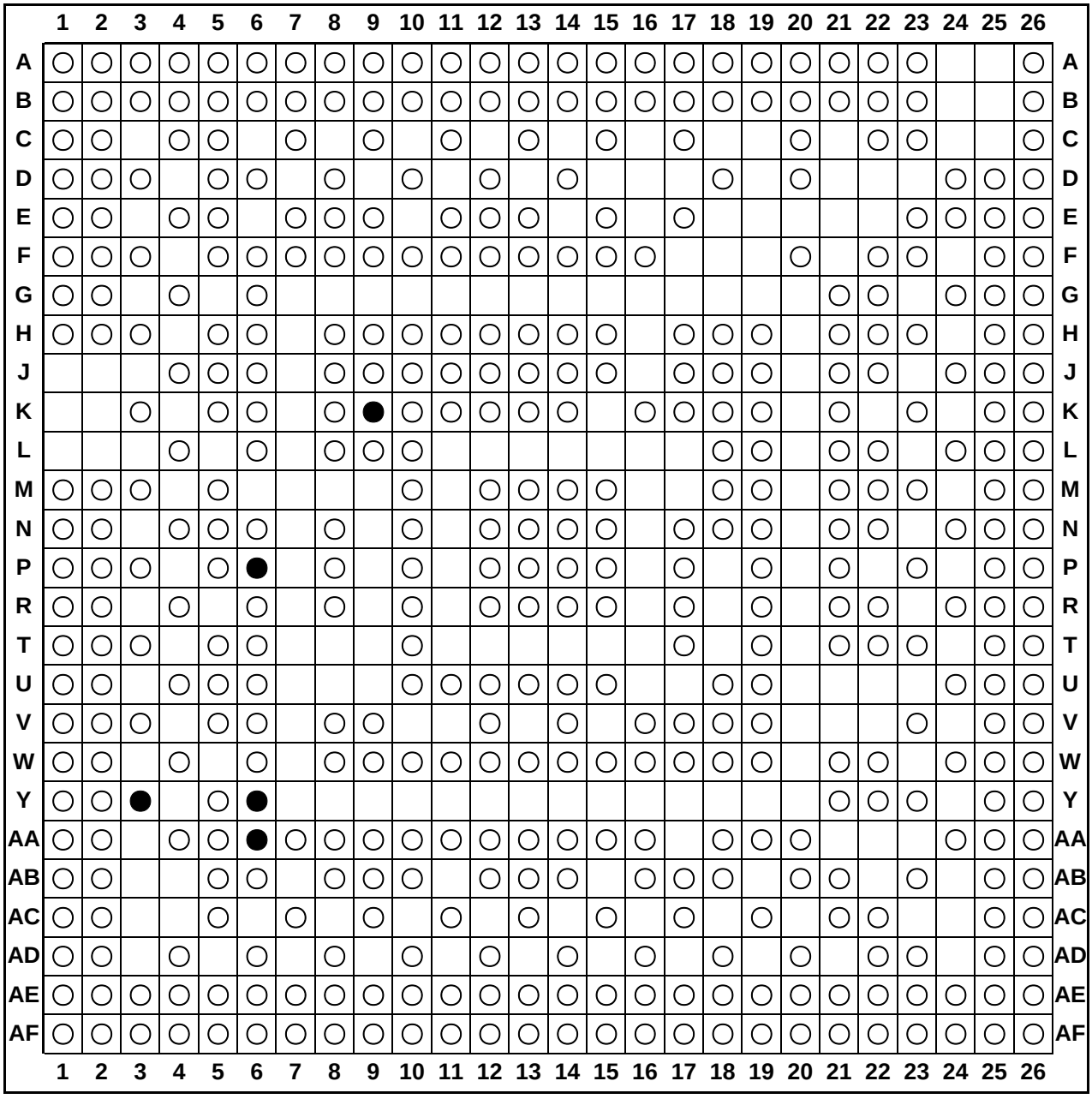
UCP300



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